This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google™ books

http://books.google.com

NYPL RESEARCH LIBRARIES
3 3433 00934246 4

Flag Signalist's Handbook

—Guild

Digitized by Google

1. Military signaling

☆ ESMONDE M. OBRIEN, BROOKLYN 2, N. Y.

Digitized by Google

U. S. SIGNAL SCHOOL, FORT LEAVENWORTH, KANS.

Flag Signalists' Handbook

By

MAJOR GEORGE R. GUILD
6th Infantry
United States Army

The Collegiate Press
GEORGE BANTA PUBLISHING CO.
MENASHA, WISCONSIN

[illegible]
VW1
Guild
Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
5787248
ASTOR, LENOX AND
TILDEN FOUNDATIONS
R 1951 L

Copyright by
George Banta Publishing Company
1917

PRINTED AND BOUND BY
GEORGE BANTA PUBLISHING CO.
MANUFACTURING PUBLISHERS
MENASHA, WISCONSIN

Digitized by Google

INDEX

REMARKS ON SIGNALING AND MESSAGES

	Page
Remarks on Flag Signaling:	
To Organization Commanders	9
To Flag Signalists	10
What persons should know regarding messages:	
What the writer should know	12
What the signalist should know	12
How to give a verbal message	13
Acceptance and delivery of messages	13
Possibility of shortening messages	14

THE USE OF THE FLAGS

How to use the Wigwag Flag:	
How to hold the staff	15
How to make "dots" and "dashes"	15
How to Make a "front"	16
How to make words, characters, etc.	16
How to make the "attention" signal	16
How to make a Receiving Operator's "break"	16
How to make a Sending Operator's "break"	17
How to send a Common Fraction	17
How to send a Whole Number and its Fraction	17
How to send a Decimal Fraction	17
How to send mixed Letters and Numbers	17
How to use the Semaphore Flag:	
Remarks on the use of the flag	17
How to hold the flags	17
How to make letters	18
How to repeat a letter	18
How to make the "numerals" sign	18
How to make the "interval" sign	18
How to make the "attention" sign	18
How to make the "error" sign	19
How to make "one chop-chop"	19
How to make "two chop-chops"	19
How to make numerals (figures):	
After having made an "interval"	19
After having made a letter	19
How to send letters after having been sending numerals:	
If an "interval" followed the last numeral sent	19
If a letter is to follow without interval	19
How to send Common Fractions	20
How to send a Whole Number and its Fraction	20
How to send Decimal Fractions	20
How to send Code words	20
How to send words not a part of a message	20
Wigwag and Semaphore positions—PLATE I	22
Explanation of Plate I	22

CHECKING, ACKNOWLEDGING, BREAKING, ETC.

How to check:	
Rules for checking, with examples	24
Example of a properly checked message	24
How the check is assured	24
How to acknowledge:	
To acknowledge a station calling you	26
To acknowledge the receipt of a message	27

Digitized by Google

How to break: Page

When sending, to break 27
When receiving, to break 27
When sending, and the Receiver breaks 27
When receiving, and the Sender breaks 28

CALLING AND SIGNING

Reasons for calls and signs 28
How to call and to sign 29
Calls and Signs:
Numeral Calls and Signs 32
Letter Calls and Signs:
One letter 32
Two letter 32
Three letter 33
Examples of Calls and Signs, all troops 34-37

TYPES OF FLAG MESSAGES

Standard Field Message (Signal Corps form):
On being handed a message 37
On sending a message 37
On receiving a message 37
Order in which a message is sent 38
How a message is called 38
Incomplete messages 39
Sample Field Message—PLATE 2 40

Combat Message:
What it is, and rules governing it 41
Examples of Combat Messages 42
The Combat Message blank 42
What the writer writes—PLATE 3 43
What the Sending Signalist sends—PLATE 4 44
What is signaled by flag—PLATE 5 45
The delivered message—PLATE 6 46

Combat-Code Message:
What it is, and rules governing it 47
Sample Combat-Code messages 48
How to combine combat mandates and abbreviated words 48
How the Receiving Signalist may know what type of message to expect 49

List of Abbreviated Military Words:

A 50
B 50
C 50
D 51
E 51
F 52
G 52
H 52
I 52
J 52
K 52
L 52
M 53
N 53
O 53
P 53
Q 54
R 54
S 55
T 55
U 55
V 56
W 56
X 56
Y 56

FLAG CODES

Fronts, Intervals, and Chop-chops 56
The Semaphore Code—PLATE 7 57
Letters and Numbers, Wigwag 58
Punctuation Marks, Wigwag and Semaphore 58
Abbreviations, Wigwag and Semaphore:
For Wigwag or Semaphore 59
For Wigwag only 61
For Semaphore only 61

Digitized by Google

Page

Letter Mandates, Combat-Code (Drill Regulation letter mandates):
Infantry 62
Cavalry 62
Field Artillery 62
Coast Artillery 64

QUICK REFERENCE INDEX TO ABBREVIATIONS AND CALLS

Numeral calls 64
One-Letter abbreviations 64
Two-Letter abbreviations 65
Three-Letter abbreviations 66

THE USE OF THE CIPHER SQUARE

Enciphering and deciphering messages:
To encipher a message 67
To decipher a message 67
Alphabetical Cipher Square (Identical with Cipher Disk) 68

Digitized by Google

Digitized by Google

INTRODUCTION

By MAJOR WILLIAM P. KITTS
Ninth Infantry, United States Army

A book is badly needed by the Infantry (and by the other arms) that will teach a **standard** and **practical** use of the flag for handling short messages on the battlefield and in campaign, so that troops of one organization can work understandingly with those of another, and the **Flag Signalists' Handbook** meets the requirements fully.

The salient feature of this little book which appeals to me most is the method it teaches whereby any organization or its commander, from a squad and its leader to a division and its commander, may be called by flag without the least cause for confusion, and the author's ingenious "Combat Message" by means of which the number of characters now used in transmitting our Field Messages may be reduced about 75%—a saving in TIME, when time may mean success or failure, life or death.

No organization in the service has been assigned a call by means of which other organizations may get into communication with it. We cannot use the letter designations of our companies, troops, and batteries because these letters are used for battlefield mandates—to call "F" Company with "F" would be to notify every one in sight to "Commence Firing," which might be exactly what we do not wish to do. The book corrects this deficiency and supplies a simple and effective method for calling any organization, station, advance guard, patrol, etc., in the service.

The wonder is that we have not made use of a message along the lines of the author's "Combat Message" long ago. Only one who is himself a commercial telegrapher would have been liable to have thought of it. If one can transmit, on the battlefield, a 400 character message in 100 characters with equal surety, by means of the flag, with practically no tax on the memory of the signalists concerned, then surely that type of message is of value to the LINE.

Conceive a brigade deployed for action. This brigade has, perhaps, some forty different companies, each of which will probably have use for its flags during the engagement; besides this, there are some nine Battalion Commanders, three Regimental Commanders, and the Brigade Commander, all of whom are directing units under them.—is it not apparent, when we come to think of it, that without iron-clad rules and strict and standard methods to govern our use of the flag we will fail to get the results from them that we should expect to get? The telegraph, buzzer, or radio operator LISTENS WITH HIS EARS while he RECORDS WITH HIS HANDS in some spot protected from fire, but the FLAG SIGNALIST must read the message WITH HIS EYES, and, while doing so, sees the whole landscape and probably many other flags besides the one he is looking for; he must read and record at the same time, and when he rises to answer he IS EXPOSED TO FIRE. Truly he must be the equal of the wire-line operator to be able to be of practical benefit to anyone.

One cannot study the pages of this little book without recognizing that the author has kept THE BATTLEFIELD constantly in his mind in teaching the signalist how to use his flags. So thoroughly and carefully has the entire subject been gone into that even such an apparently insignificant thing as HOW TO MAKE A FRONT has not been omitted. Checking messages, acknowledging messages and calls, calling, signing, "breaking,"—in fact, every phase of flag work has been completely covered, and handled in such a way that any enlisted signalist can understand what to do and how to do it.

I believe this book merits general recognition throughout the service, for where our flags have meant little to us heretofore (as regards their practical value in deployments) they may now be utilized to their fullest extent and be a valuable asset to any commander.

Digitized by Google

Digitized by Google

REMARKS ON FLAG SIGNALING

TO ORGANIZATION COMMANDERS

To those organization commanders whose duty it is to outline instruction, or impart it, in organizations of the Line, this page is intended as a guide.

Signaling by means of the flag is the most difficult signaling to read correctly and accurately.

Merely the ability to make and read the alphabet and the numerals will never constitute a signalist. Only men who can write a neat and legible hand, can spell correctly, and have a little above the average degree of intelligence can ever expect to produce practical results in this work on the battlefield.

It is better by far for the Organization Commander to have a few men (say half a dozen) upon whom he can absolutely rely to produce results than it is to try to have every man in the company know the alphabet and not have a single man in it who can handle a message in the heat of an engagement.

Organization Commanders do not, as a rule, understand the difficulties under which the flag signalist labors. If such commander would himself "learn the alphabet," then get out at a distance from another station and try to handle some practical messages and combat mandates, when there are other organizations all about him, none of whom know for whom the message is intended, he would see for himself what his flag operator is up against.

Remember that your signalist is probably being shot at, or at least is exposed to fire; that he is confused with his surroundings and the excitement of an engagement; that there are many other organizations present besides your own; that your exact location is not always known to the one for whom the message is intended; and that there are other persons beside yourself who are attempting to get information back and forth across the battlefield. This, if you bear it in mind, should materially influence you in selecting men who are to handle this work for you when you need them.

Above all things, when you train your signalists, make them assimilate actual field conditions. Make these men get out far enough from one another to make signaling difficult, and do not allow any "barrack stepe" signaling, and absolutely no calling from one signalist to another.

Require signalists of one organization to handle messages with those of other organizations. Prepare problems for them just as you do for your Noncommissioned Officers in troop leading, and make these problems consist of every conceivable condition that would be liable to confront these signalists in time of hostilities.

Do not have a "wigwag squad" and a semaphore squad," but have a "signal squad," able to handle wigwag or semaphore with equal facility.

As regards wigwag, give preference to instruction in the regular Signal Corps FIELD MESSAGE, and make your signalists send their messages over a distance of from 1,000 to 2,000 yards.

As regards semaphore, give preference to instruction in the COMBAT MESSAGE and the COMBAT-CODE MESSAGE, and require signaling to be done at distances of not less than 500 yards.

Write a Standard Field Message correctly. Hand this message to one of your signal squads and require it to be sent by wigwag at a distance of at least 1,000 yards. Direct the "out" station to bring you the message they record, and see to it that this message is an exact copy (a regular carbon copy, as it were) of the message you handed to the "in" station, except as regards the "time filed" in the upper left hand corner, which space is filled in on the SENDING BLANK but not on the RECEIVING BLANK.

Write COMBAT MESSAGES and cause them to be sent abbreviated. Also dictate these messages. But never dictate a Standard Field message,—write it out.

Digitized by Google

Whenever you send out any signal squads tell them that they are some organization or body of troops. Say to one station, "You are my signalist" and to the station which is to work with it, "You are the signalist with the Point," or with the Outpost, a Patrol, another Company, the Battalion Commander, etc. For that is exactly what would occur in time of hostilities.

If possible, always let a "station" consist of TWO MEN. For efficient wigwag work this is absolutely essential, though for semaphore work not so much so. Just try to READ A FLAG at a distance and WRITE DOWN THE MESSAGE at the same time, unaided, and you will see why.

Practice some "one man work" with your squads, so that the SENDING operators will learn to pause long enough between letters and words for the RECEIVERS to record what they read.

All these little things, and many, many more, count in signaling. By paying close attention to them you can have an efficient signal squad, but by neglecting them you have nothing.

Learn how to write a message correctly so that you will not cause the signalist to have to fill in, or alter its construction before he can send it.

Select the proper type of message. If there is NEED to send a message according to the Field Message type then use that type, but 99 out of every 100 messages sent by means of THE FLAG can be and should be abbroviated and shorn of every unnecessary word, and when this is possible the writer should write his message in the COMBAT MESSAGE form and direct it to be so sent. You do not need to have a message blank at all if your signalists are trained: you can write on a piece of paper and say "Send this Standard Field" or say "Send this Combat" and the signalist should be so familiar with the two forms that he can send it according to either form from memory.

TO FLAG SIGNALISTS

Let me impress upon Flag Signalists the necessity for their studying this art and mastering it. You can be of great value to your organization if you BECOME AN EXPERT FLAG SIGNALIST, but to do so you must master every little detail in this art.

You must be able to write a neat hand, and one that can be read: you must be able to spell correctly: you must thoroughly learn by heart all the abbreviations of the military words given in this book: you must know how to check, break, acknowledge, call, and sign, and must rigidly follow the methods outlined for doing so, because if other signalists do so and you do not, then you cannot handle their messages as you should.

Be careful in the use of your "fronts" and "intervals"; put them EXACTLY where they belong and nowhere else.

Learn how to handle your flags correctly, and do what the book tells you to do in this matter. With the wigwag flag get your legs apart, take the staff at the very end, and swing that flag far to your right and your left in making dots and dashes.

Here is a rule I want to drive home to you as forcibly as I can, for it is vital to the interests of the DISTANT STATION which is working with you:

YOUR FLAG IS EITHER TO BE EXPOSED OR BE OUT OF SIGHT AT ALL TIMES. WHEN IT IS EXPOSED IT MUST BE EITHER MAKING A DOT, A DASH, OR A FRONT, OR BE HELD RIGIDLY STATIONARY AT THE VERTICAL POSITION. WHEN THE FLAG IS NOT BEING USED KEEP IT OUT OF SIGHT OF THE DISTANT STATION BY EITHER CURLING IT UP OR HIDING IT BEHIND A BUSH. REMEMBER THAT A MILE AWAY THE OTHER STATION BECOMES CONFUSED WITH ANY MOTION YOU MAKE WITH YOUR FLAG THAT IS NOT A CHARACTER OR A FRONT TO THEM. AND THAT A FLAG LYING ON THE GROUND MAY LOOK, AT A DISTANCE, AS THOUGH IT IS BEING EXPOSED AT THE VERTICAL.

Digitized by Google

Remember also that THE FLAG WHICH IS UP (exposed at vertical) is the flag which "has the floor," so to say, and that the flags of the near station and the distant station should never both be UP at the same time. When one goes up the other must go down promptly.

Don't guess at what is coming; READ THE MESSAGE BEING SENT and record EXACTLY WHAT IS SENT. If this does not make sense BREAK. Break promptly, and don't let the sending station keep on sending if you are not getting them. If you allow the sending station to send more than ONE WORD after the one you failed to get you should receive disciplinary measures which would impress upon you the fact that YOU ARE TO BREAK AS SOON AS YOU FAIL TO READ WHAT IS BEING SIGNALED.

When the distant station breaks and begins to signal, READ and RECORD on a piece of paper what such station is saying; don't merely watch that station in semi-idle curiosity.

Learn the different types of message. Be able to CALL THE BLANK FORM for either the Field Message or the Combat Message from memory, like this, substituting words to serve as examples:—

Field Message.—Nr 11 7 Jo Ck 28 Ofm Fm and words on that line At and words on that line 25 Ho 805 AM Nr 12 double-dash To and the words of the address double-dash Text of the message double-dash Sig and the signature of the writer three fronts and I expect to be acknowledged by R front 2 front Rm three fronts.

Combat Message.—If the message is from one organization commander I begin with the text of the message, finish the text, and give three fronts, and wait for an acknowledgement.

If the message does not concern organization commanders I send it like this "To Lieut Brown at Snake Creek from Lieut Smith at Jones farm" and then give the text of the message and wait for an acknowledgement after I have sent the three fronts.

Combat Code Message.—I signal attention, then call and before I sign I send "U" and the combat mandates. I repeat the combat mandates but if I am not acknowledged promptly I call and give "U" again. I expect to be acknowledged while I am sending the combat mandates, and then I sign. I may sign many times.

Until a signalist can call the forms from memory he is no signalist.

Don't delay delivering a message after you have received it; get it to the person to whom it is addressed, promptly.

If you accept a message you are responsible for its being signaled within a reasonable time, or else you must report that it could not be signaled.

If you are the receiving operator and you have received a message and cannot find the person for whom it is intended you must call the signalist who sent it to you and report "No delivery on msg to ....."; or, if it is apparent that delivery of that message will be delayed, report "Delivery on msg to ..... delayed."

If you are called upon to send a CODE message, send more slowly and more carefully than usual. If time will permit, repeat each word,—that is, send a word, then send it again, but when you come to a group of figures send ALL of the group before you repeat any one of the figures.

Be constantly on the alert for calls for your organization. If you see a signalist signaling "attention," watch to see what call he makes. If it is for you WAIT TILL HE SIGNS, then snap your acknowledgement to him promptly. If he calls with "4" it concerns YOU ALSO.

If a signalist calls you, then calls other organizations also, watch for the message, for it concerns you and others also.

If you are the sending signalist and are to send a message to several other signalists, call each one, but when you send the message DO SO VERY SLOWLY AND CAREFULLY so none of them will break. If, while you are sending a message to several different signalists at the same time, one of them should break, YOU MUST BREAK as though you made the error yourself, and repeat the word such signalist broke on.

If a distant signalist, in acknowledging your call, adds "ALONE" you will understand he has no one to record the message for him, and after you have sent a letter you must pause sufficiently long to enable him to

Digitized by Google

glance at his paper and record that letter. If you don't do this he will continually break you and you will gain no time in the long run. While you pause you keep your flag AT THE VERTICAL. As regards semaphore, send him three letters, then pause in the position of the third letter (that is, HOLD THAT LETTER to give him time to record the THREE LETTERS you sent him); then go ahead for three more unless you come to INTERVAL in the meanwhile. If the receiver is AN EXPERT you can send him the entire word if it does not exceed five or six letters.

Semaphore signalists (and a SIGNALIST is not worthy of that title unless he knows BOTH CODES) should abbreviate words all of the time; they should almost THINK in abbreviated words. To such a signalist the word "enemy" should be "nml." The semaphore signalists should SEND AN ENTIRE WORD as fast as they can send it, and receiving signalists should become expert in catching WORDS, not separate letters. This is what a telegraph operator does.

A final word to signalists:—The author longs to see the art of FLAG SIGNALING become a "finished product" in our army, and be made a great deal of in our field work, so if any signalist desires to question the author on any point in regard to flag signaling he will get a prompt reply to his query if he encloses a stamped and return addressed envelope. Wonderful use can be made of the flag on the battlefield, on marches, reconnaissances, outposts, etc., IF SIGNALISTS ALL FOLLOW THE SAME IRON-CLAD RULES AND BECOME EXPERTS with their flags.

WHAT PERSONS SHOULD KNOW REGARDING MESSAGES

WHAT THE WRITER SHOULD KNOW

You should know how to write, correctly, a Standard Field Message and a Combat Message, but you need not know the Combat Code Message, nor the calls, signs, or abbreviated words.

You should never send a message by flag if you can send it more quickly by any other means.

You should give the Combat Message preference over the Standard Field Message on the battlefield.

You should never give a verbal message to be sent by means of a flag if you can help it, but if you have to give one you should make it very short and contain but one mandate.

When you write a message you should do so according to form. There are only two forms practicable, the Standard Field and the Combat.

You should know the type of message suited to delivery. You may materially assist in the quick dispatch of your message if you will write it so that the signalist does not have to switch it all around to get it into form before he can send it according to form.

Remember the form of the Combat Message by remembering that it is reversed in form from that of military correspondence, and is as follows:

To ..... Such a person.
From ..... Yourself.
Message proper.
No Signature, but writer adds his initials.

DON'T USE PUNCTUATION MARKS in your messages unless you absolutely are obliged to do so to prevent wrong interpretation of the message.

WHAT THE SIGNALIST SHOULD KNOW

That **TWO MEN** constitute one station whenever possible.

That **No. 1** is in charge of that station; that he is responsible for every message that passes through that station; that it is his initials which appear in the top line of the Standard Field Message; that he is responsible for the proper abbreviations being used, for proper deciphering

Digitized by Google

of these abbreviations when he is the receiving station; for careful and distinct recording of the message; for careful sending of the message; for prompt delivery of the message; for alertness at his station.

That **No. 2** is the one who handles the flag, and is merely a machine whose duty it is to make, correctly, only what is called to him by No. 1.

That, **WHEN SENDING,** No. 1 handles the message and calls it to No. 2, and sees that No. 2 sends it correctly; that No. 1 watches for breaks, while No. 2 watches his flag. That, **when sending,** either No. 1 or No. 2 may call "Break."

That, **WHEN RECEIVING,** No. 1 records the message and No. 2 reads and calls the distant station. That, **when receiving,** usually only No. 1 calls "Break." The calling of "Break" by No. 2 must be regarded as exceptional even though he fails to read a letter. In this case No. 2 calls "Miss," but waits for No. 1 to call "break" before he breaks.

That, **on a break** by the distant station while this station is sending, No. 2 reads and calls the distant station and No. 1 records what No. 2 calls.

That **if only one man** constitutes a station he performs the duties of both No. 1 and of No. 2.

HOW TO GIVE A VERBAL MESSAGE

Messages, to be properly handled by signalists, must be properly given; officers should never **dictate** a long message to a signalist any more than they would expect to be permitted to dictate a telegram, because it takes longer for the signalist to write out that message than it would take the officer himself, and chances of errors are greater.

Verbal messages should be given freely to trained signalists only if these messages are of a certain type, that is:

They must be very short.

They must contain only one definite mandate.

They should be limited to messages of the Combat-code type.

Whenever a verbal message is given it should follow this form:

Notify Company B (not Captain Brown) to establish outpost on hill 102 facing north.

and not in the form,

Send a message to Capt. Brown over there on that hill and tell him to establish an outpost line facing toward the railroad cut.

Know the personal equation of your signalist and regulate your verbal messages accordingly; if you have a poorly trained signalist, give him no verbal messages at all.

ACCEPTANCE AND DELIVERY OF MESSAGES

Do not accept a message you cannot read, nor one which is confusing to you; nor one that does not show from whom it originates and to whom it goes; nor one that contains anything that cannot be sent by means of the flag; nor one you absolutely know cannot be delivered; nor one from a person whom you do not know or cannot afterwards identify; nor an improper message of any kind.

Having received a message, deliver it at once. If this cannot be done, notify the sending station "Delivery delayed." If it cannot be delivered at all notify the sending station "No delivery."

If a message is a proper one, accept it in whatever shape it is written and on whatever paper, then put it into proper shape before you send it. **IN ANY CASE, SEND YOUR MESSAGE ACCORDING TO STRICT FORM** even though you have to alter the sequence of the message to be able to do so.

Accept a Standard Field Message to be sent EXACTLY AS WRITTEN (if written in proper form), do not alter it in the least without the writer's permission, and do not abbreviate a single word in it that is not written in an abbreviated manner.

Digitized by Google

POSSIBILITY OF REDUCING MESSAGES

The following illustrates how a message may be reduced and still retain its qualities of a message and be delivered in a form which will give its true meaning. The characters represent just what the sending signalist would signal. The message is the same in all cases shown.

Signal Corps Field Message:— (395 characters)

Nr 6 3 Jo Ck 58 Ofm
Fm Commanding Officer 3rd Battalion 23rd Infantry
At Sperry Farm House
5 Ho 3 30 PM Nr 2
To Commanding Officer 23rd Infantry
Crossroads two miles East of Seymoure
Am preparing to move forward if not instructed to the contrary Cavalry patrols scouting in the vicinity of Forks River report enemy concentrating northeast of that point apparently with the intention of turning our left flank. Enemy squadrons appeared on our left all afternoon

Sig
Johnson Major

Combat Message, not abbreviated:— (235 characters)

7 3
Am preparing to move forward if not instructed to the contrary Cavalry patrols scouting in the vicinity of Forks River report enemy concentrating northeast of that point apparently with the intention of turning our left flank Enemy squadrons appeared on our left all afternoon

Combat Message, using abbreviated words:— (127 characters)

7 3
Am prepg to mv frd if not instd to contrary Cav pls sctg vcnty Forks Riv rpt nmi concntg ne tt pt aprntly wi intntn turng our lfk Nmi sqs aprd on our lt all afn

Combat Message, using abbreviated words and Combat-Code letter "g":— (96 characters)

7 3
Am g Cav pls sctg vcnty Forks Riv rpt nmi concntg ne tt pt aprntly wi intntn turng our lfk Nmi sqs aprd on our lt all afn

Conclusions:—

By leaving out the preamble and signature of the Signal Corps Standard Field Message we reduce from 395 characters to 235, a saving of 160 characters. By using the list of abbreviated military words we further reduce to 127 characters, or a saving of 268 characters. By using the letter-code letter "g" we still further reduce the message to 96 characters, or we have made a TOTAL REDUCTION OF 300 CHARACTERS (exactly, 299) IN A 400 (exactly, 393) CHARACTER MESSAGE and yet have not harmed it in the least provided the location of Major Johnson was known to the Regimental Commander, as undoubtedly would be the case if the former's FLAG signalist sends a message BY FLAG to the signalist of the latter.

HOW TO USE THE WIGWAG FLAG

This flag is the proper one to use for distant and difficult signaling, and all practice with it should be exclusively to that end.

The greatest swinging arc must be obtained; the motions must be continuous and easily and gracefully made; the "fronts" must be plainly distinguishable and not be confused with the pause at the vertical position; when the flag is not actually in use it must be totally out of sight.

When the flag is in use it must be in one of the following positions:—Resting on the ground at the completion of a front; at the strict vertical position; in the act of making a front; in the act of making a character.

When the flag is at the "vertical position" it must be held well up and rigidly stationary.

All swinging motions must be so made that the flag will not wrap around its staff.

Digitized by Google

The speed in making characters will depend upon the distance the receivers are away. If sending for distance, a front should never follow a character without a very perceptible pause after such character.

The staff must be grasped with both hands, and the present practice of "thumb and finger" signaling must be discouraged if good results are to be expected.

HOW TO HOLD THE STAFF

Squarely face the receiving station; spread the legs well apart, separating the feet by about 24 inches, weight of body resting equally on both feet, knees flexible.

Firmly grasp, with the left hand, the butt of the staff at its very end, hand around the staff, not under the butt. Firmly grasp the staff with the right hand about 10 to 18 inches above the left hand, depending upon the height of the staff.

Raise the staff to a position nearly vertical, the tip extending to the front about 18 inches in advance of the butt.

This position is known as THE VERTICAL POSITION.

HOW TO MAKE A DOT

Keeping both feet firmly in position, turn the body to the right front, slightly bending the right knee and straightening the left knee. At the same time, swing the flag well out to the right front, lowering it, and directing its tip at a point on the ground about 24 inches in front of, and as far to the right of, the operator as the tip of the staff would have rested had it been lowered to the ground, the operator extending both arms to their full extent. Just before the tip reaches the ground, swing it to the rear, causing the lower edge of the flag to just graze the ground. Carry the flag a distance to the rear about equal to the distance it was carried to the front. Return to the original position.

The motion just described is made without pauses or jerks, in a graceful manner, and with just enough speed to keep the flag from wrapping around its staff.

This motion constitutes ONE DOT.

HOW TO MAKE A DASH

The dash is made as described for the dot, but to the left instead of to the right, slightly bending the left knee and straightening the right knee.

This motion constitutes ONE DASH (but see how to make a "Dash-front").

HOW TO MAKE A DOT-DASH

As described for a dot, then for a dash, with no pause at the vertical position,—the result being a figure-of-eight with the cross in front of the center of the signalist.

This motion constitutes ONE DOT-DASH.

HOW TO MAKE SEVERAL DOTS IN SUCCESSION

As described for one dot, except that, in returning to the vertical position, carry the tip of the flag slightly forward, and with a counter-clockwise horizontally circular motion of both hands, swing the tip back toward the vertical potition, and cause the flag to follow without wrapping around its staff, being careful to see that the staff does not pass the center of the body at any time. Without pause, make each succeeding dot. The result is a figure-of-eight with the cross about opposite the right shoulder.

HOW TO MAKE SEVERAL DASHES IN SUCCESSION

As described for making several dots in succession, except that, in this case, both hands describe horizontal clockwise circles. The result is a figure-of-eight with the cross about opposite the left shoulder.

Digitized by Google

HOW TO MAKE A FRONT

Lower and direct the tip of the staff at a point on the ground directly in front of the right foot and at a distance from that foot as determined by the position the tip would have rested had it been lowered to the ground. When the tip is about to touch the ground, carry it directly to the left until about opposite the left foot, and return it to the vertical position, causing the lower edge of the flag to just graze the ground.

The entire motion is continuous and made at a speed merely sufficient to keep the flag from wrapping around its staff.

This motion constitutes ONE FRONT.

In long distance difficult signaling, momentarily rest the tip of the staff on the ground at the "front" position before raising it to vertical position, then return flag to vertical position with one quick motion; pause at this position momentarily before making a dot or a dash.

The position, when resting on the ground, is known as DOWN.

The motion just described is known as a LONG DISTANCE FRONT.

HOW TO MAKE A DOT-FRONT

Proceed as for making two continuous dots, except that, instead of lowering the flag to the right for the second dot, lower the tip to the front opposite the right foot, carry it to the left until opposite the left foot, and return to the vertical position.

This motion constitutes ONE DOT-FRONT.

HOW TO MAKE A DASH-FRONT

Proceed as for making two continuous dashes, except that, instead of lowering the flag to the left for the second dash, lower the tip to the front opposite the left foot, carry it to the right until opposite the right foot, and return to the vertical position.

This motion constitutes ONE DASH-FRONT.

HOW TO MAKE CHARACTERS, WORDS, AND NUMERALS

It must be remembered that the pause at the vertical position is **THE ONLY MEANS** of separating the letters of a word and the figures of a numeral, consequently not only must each letter be made without the least indication of a hesitation or pause while making that letter, but a very distinct and plainly evident pause must be made at the true vertical position in order to separate the letters of the word. And the separation of one word from another word must be equally plain and evident by a perfectly, and not too quickly, made "front."

In long distant signaling, a "front" should never follow a letter as a component part of that letter, as is permissible in short distant signaling, but a distinct pause at the vertical position should be made, then a "long-distance front" executed.

Beginners must be impressed with the fact that the distant receiving station is attempting to read a very small and quite indistinct moving object, and every false motion, exposed flag when no flag should be exposed, and unevenly made letters make it quite impossible for the receivers to read the sender no matter how expert the former may be.

The greater the distance the greater is the necessity for exceedingly careful sending,—and the rule "Make haste slowly" is golden.

HOW TO MAKE THE ATTENTION SIGNAL

Make a number of dot-dashes without pauses or fronts, and stop at the vertical position.

HOW TO MAKE A RECEIVING OPERATOR'S BREAK

Raise and hold the flag at the vertical position until the sender perceives the signal and stops sending, lowers his flag, and removes it from view.

Digitized by Google

If, while working at long distance on a quiet day, and the raising of the flag to vertical cannot be seen, execute the attention signal until the sender perceives the signal.

HOW TO MAKE A SENDING OPERATOR'S BREAK

Make a front without finishing the word; make eight dots; make a front; begin the same word over.

HOW TO SEND A COMMON FRACTION

Send the numerator, and pause at the vertical position.
Send L and pause at the vertical position.
Send the denominator, and make a front.
Example:—To send ¾.
Sent:—3 L 4 front.
Note:—L is for "Line" and to agree with semaphore.

HOW TO SEND A WHOLE NUMBER AND ITS FRACTION

Send the whole number and pause at the vertical.
Send N and pause at the vertical.
Send the numerator of the fraction and pause at the vertical.
Send L and pause at the vertical.
Send the denominator, and make a front.
Example:—To send 56¾.
Sent:—56N3L4 front.
Note:—"N" is the middle letter of "aNd."

HOW TO SEND A DECIMAL FRACTION

Note:—A "decimal point" is "i i i."
Send the whole number and pause at the vertical.
Send i i i and pause at the vertical.
Send the figures after the decimal point, and make a front.
Example:—To send $21.42 cash.
Sent:—Sx (front) 21 i i i 42 (front) cash (front)

HOW TO SEND MIXED LETTERS AND NUMBERS

Make a front only between the different groups, or factors.
Example:—To send CB74 CA23D 76Voc
Sent:—CB74 (front) CA23D (front) 76Voc (front)

HOW TO USE THE SEMAPHORE FLAG

REMARKS CONCERNING THE FLAG

The semaphore is the quickest method of signaling by means of flags, but errors are so easily made that extreme care is necessary if the semaphore is to be of practical benefit to troops,—with this care it will be of great benefit.

Semaphore should be used for hasty work on the battlefield and on the march when the distances are not excessive. It is the better of the two codes to use in Combat-code Message Work.

The limiting distance for practical work is about 500 yards, though the author has used these flags, with the aid of field glasses, at distances in excess of one mile.

HOW TO HOLD THE FLAGS

Grip the staffs at their butt ends, thumbs along the staffs, flags to hang so as to expose their maximum areas at all times. Keep the flags in prolongation of the arms by keeping the thumbs in prolongation of the arms.

Digitized by Google

HOW TO MAKE LETTERS

Keep the full surface of the flags exposed as much as possible. Make the quadrant positions with accuracy, and equally with both hands. Never allow the hands and arms to incline to the rear. Keep the staffs in prolongation of the arms. Use full arm extensions.

In making the letters "d" and "j" turn the elbow to the front, in front of the face.

In making the letters "k," "p," and "t" turn the elbow to the front, in front of the face.

In making the letters "h," "i," and "o" turn the body on the hips slightly to the right.

In making the letters "w," "x," and "z" turn the body on the hips slightly to the left.

Go directly from "Attention" to the first letter of the word, without making any intervening "interval." As regards numerals, see "How to make numerals."

Never make an "interval" between the component parts of any word, numeral, or factor of combined letters and figures. See "How to make numerals."

For rapid signaling, when flags are handled by expert semaphore operators:—

The letter "d" may be made with either hand.

The letters "h," "i," "o," "w," "x" and "z" may be made with either hand uppermost.

Example:—Moving one arm only, "deed," "decade," "Wilholm," "milkman."

HOW TO REPEAT A LETTER

For all letters except "a," "b," "c," "d," "e," "f," and "g" bend **both forearms**, and, for the excepted letters, bend **the forearm** of the extended arm, in toward the body, so that the flags (or flag) will strike the chest just under the chin.—**DON'T BEND THEM TO THE POSITION OF "INTERVAL"** as so many operators do; then instantly reassume the position for that same letter.

HOW TO MAKE THE NUMERAL SIGN

Cross the wrists above the head, arms fully extended diagonally upward, pausing momentarily; go directly from this position to that of the first figure without making any intervening "interval."

HOW TO MAKE THE INTERVAL SIGN

Bring the hands together in front of the body, arms extended diagonally downward, but slightly bent at the elbows, staffs crossing just below the hands.

HOW TO MAKE THE ATTENTION SIGN

Bring the flags to the position of "r," and, without any pause at this position, carry the hands straight toward the top of the head without moving the position of the upperarms (extended laterally), flags meeting and crossing above the head; without any perceptible pause, reassume the position of "r" and immediately return to the same position over head. Continue as long as may be necessary to attract attention.

In making the "attention" signal to break "numerals" and restore "letters," make only two swings of the arms at the "attention," then go directly to the position of the first letter without making any intervening "interval."

Having made the "attention" signal, and without pause, go directly from the position of this signal to the first letter of the word which is to follow; or to the numeral sign if numerals are to follow; or outward and downward to the "interval" position if an "interval" is to follow.

Digitized by Google

HOW TO MAKE THE ERROR SIGN

Assume the position of "d," and, without pause, wave the upper flag (usually the one in the right hand) from right to left and back, several times, across and above the face; without pausing at the position of "d," and without making any intervening "interval," go directly to the position of the first letter of the word to be repeated; or to the "numeral" sign if the repeated character is to be a figure.

When communicating with the Navy, or with troops other than those of your own organization, use "a a" instead of the above.

Note:—The prescribed error signal "a a" cannot be distinguished at a distance and invariably causes confusion when used, "A" being the letter least distinguishable at a distance.

HOW TO MAKE ONE CHOP-CHOP

From the position of "interval," or directly from the position of any letter or figure:—

Turn the body on the hips to the right front; alternately swing the forearms upward and downward SEVERAL TIMES, about opposite the waist, the flag in the right hand swinging in rear of that in the left. Return to "interval" WITHOUT PAUSE.

HOW TO MAKE TWO CHOP-CHOPS

Make ONE CHOP-CHOP, but, instead of returning to "interval," PAUSE with the right hand up and the left down; now make ONE CHOP-CHOP (returning to "interval").

Note:—By "One Chop-chop" is meant that series of motions described in the paragraph above, not merely one "chop."

HOW TO MAKE NUMERALS (that is, figures)

After Having Made an Interval

Make the "numeral" sign, and from that position go at once to the position of the first figure of the numeral to be given. If another figure is to follow, go directly to its position. Assume the position of "interval" only after the LAST FIGURE of any numeral, but not even then if a letter is to follow as an integral part of that combination factor.

See examples at the end of this chapter.

After Having Made a Letter

If the numeral is an integral part of a letter factor, then, without making an "interval," go directly from the position of that letter to the position of "numerals"; from this position of "numerals" go directly to the position of the first figure to be sent; complete as explained in the paragraph above.

See examples at the end of this chapter.

Note:—The "numeral" sign does not precede the second numeral (not figure) if one numeral follows another. By "numeral" is meant a group of figures.

HOW TO SEND LETTERS AFTER HAVING BEEN SENDING NUMERALS

If an "Interval" Followed the Last Numeral Sent

Give the "attention" signal, and go directly from the position of "attention" to the position of the first letter to be sent, without any intervening "interval."

See examples at the end of this chapter.

If a Letter Is to Follow as an Integral Part of a Numeral Factor

Having completed the last figure of the numeral portion of the factor, and without going to interval, give the "attention" signal, and from the position of "attention" go directly to the position of the letter to be sent, without making any intervening "interval."

See examples at the end of this chapter.

Digitized by Google

HOW TO SEND COMMON FRACTIONS

Send the entire numerator, then, without making either an "interval" or an "attention" signal, send "L," and, without making either an "interval" or a "numeral" signal, send the denominator.

Example:—To send ⅝.

Sent:—(numerals) 2 L 3 (interval)

HOW TO SEND A WHOLE NUMBER AND ITS FRACTION

Send the whole number, then, without making either an "interval" or the "attention" signal, send "N," and, without making either an "interval" or the "numeral" signal, send the fraction as described above.

Example:—To send 46⅝.

Sent:—(numerals) 46 N 2 L 3 (interval)

HOW TO SEND DECIMAL FRACTIONS

Spell out the word "dot" for the decimal point, using the "attention" signal but no "interval."

Example:—To send $76.20 cash .....

Sent:—sx (interval) (numerals) 76 (attention) dot (numerals) 20 (interval) (attention) cash .....

EXAMPLES

To send "and 721"

Sent:—and (interval) (numerals) 721 (interval)

To send "and 721 426"

Sent:—and (interval) (numerals) 721 (interval) 426 (interval)

To send "and 721 426 lots"

Sent:—and (interval) (numerals) 721 (interval) 426 (interval) (attention) lots (interval)

To send Cb764D

Sent:—C b (numerals) 764 (attention) D (interval)

To send 76Voc 5

Sent:—(numerals) 76 (attention) V o c (interval) (numerals) 5 (interval)

HOW TO SEND CODE WORDS

Precede the first code word with XXX, then make a front; now send the code words until the first dictionary word appears, sending another XXX **just before** that dictionary word.

Example:—To send Notify A. G. O. that adube benit killed by Moros

Sent:—Notify (front) A (front) G (front) O (front) that (front) X X X (front) adube (front) benit (front) X X X (front) killed (front) by (front) Moros (front)

HOW TO SEND WORDS THAT ARE NOT A PART OF A MESSAGE

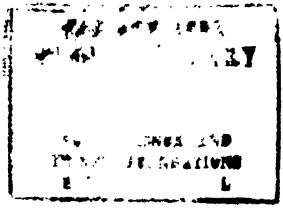
It frequently happens, in sending a long flag message, that the senders must communicate with the receivers (or vice versa) and send words they do not intend to have recorded as part of the message.

To send these words, precede them with XX front, then send the words, then send another XX front, then continue with the message.

Example:—To send .....the movement will be made at (enemy cavalry patrol wait a moment) ten P M ...etc.

Sent:—.....the (front) movement (front) will (front) be (front) made (front) at (front) X X (front) nmi (front) cav (front) pl (front) min (front) ..... X X (front) ten (front) P (front) M (front)

Digitized by Google



Digitized by Google

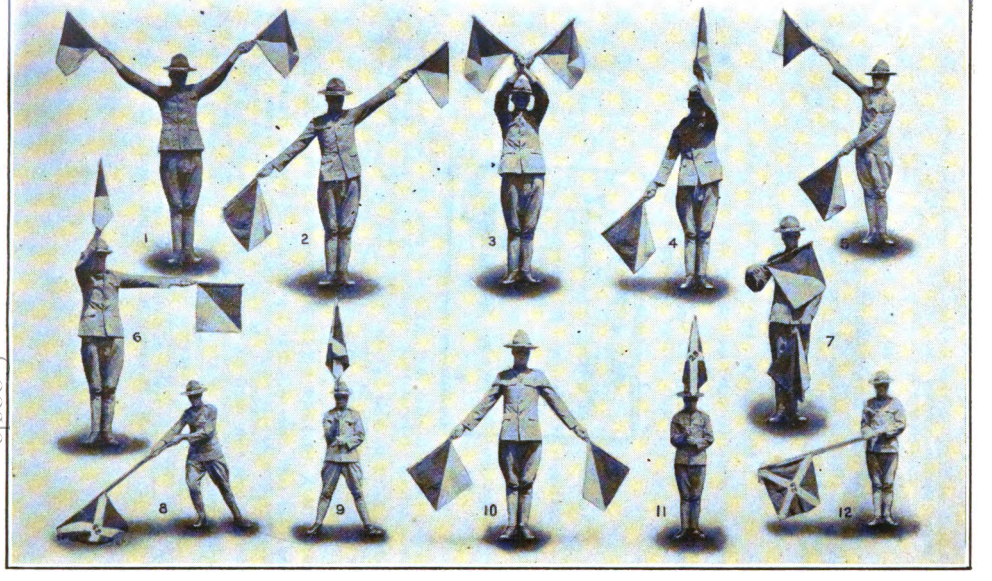


PLATE I

Digitized by Google

REMARKS CONCERNING PLATE I

1. The letter U, the signal "Combat-code." Notice what a distinguishing symbol this is when using the semaphore flags.
2. The letter L. When used for the purpose of designating the "fractional bar" it not only stands for the word L-ine, but it actually looks like the diagonal line of the fractional bar.
3. The "Numerals follow" signal. Notice the position of the wrists.
4. The letter K. It means "NO" to a question asked. Notice the position of the left elbow. Note how the flag looks when in this top position.
5. The letter I. Compare the photograph with the figure in the semaphore plate for I. Note how the signalist turns his body to make the letter plainer. This photograph also illustrates the positions of both arms at the pause separating TWO CHOP-CHOPS, see page 19.
6. This is the letter J. It is also the figure zero, and as such, is the call for an UNKNOWN body of troops, so it should be well fixed in the student's mind. Note the position of the right elbow and the right flag.
7. This shows the PROPER way to repeat a letter. In the photograph the signalist is repeating the letter "A."
8. This is the CORRECT position for executing a "dot" with the wigwag flag, the flag grazing the ground as it is being carried to the rear. Note the position of the signalist. Compare this photograph with figure 12, this plate.
9. This is the CORRECT position for the signalist to assume when about to make characters with the wigwag flag. Compare this photograph with figure 11, this plate.
10. This is the letter N. This is the signal used to show that a fraction is to follow a whole number, see page 20. It is also the "annuling" signal, meaning "never mind what I just sent you," and when so used should be repeated three or four times with intervening "intervals." Note the distinctiveness of the character.
11. This is the INCORRECT way to hold the wigwag staff. Many inexperienced signalists hold their flags in this manner and their signaling becomes uneven and jerky as a result; also the position is a tiring one, and can be seen less distinctly at a distance. Compare this photograph with figure 9, this plate.
12. This is the INCORRECT position for executing a "dot" with the wigwag flag. A figure-of-eight motion is impossible; the flag wraps around the staff; the hands and forearms become tired; and the characters cannot be distinctly and plainly read at a distance. Compare this photograph with figure 8, this plate.

Digitized by Google

HOW TO CHECK

By "check" is meant the number of words; however, only by referring to the examples illustrating what certain check-words are, can this definition be understood.

In MILITARY MESSAGES the ADDRESS, the TEXT OF THE MESSAGE, and the COMPLETE SIGNATURE are all checked,—that is, the "words" in all of these are counted. The Preamble is not checked.

In COMMERCIAL MESSAGES only the TEXT OF THE MESSAGE is checked, unless the message contains more than one signature, in which case all after the first signature is checked. These messages have no preamble.

The word "SIG," though sent, is NOT CHECKED.

"To," "from," and "at," if signaled in the COMBAT MESSAGE, as part of the address, signature, or location, are checked. They are not checked in any other type of message.

RULES FOR CHECKING

Every dictionary word is "one word."
Example:—Ten men in a boat.—5 words.

Names of Villages, Towns, Cities, States, Territories, and Canadian Provinces are "one word."
Example:—New York (1 word); New York City (1 word); Kansas (1 word); Territory of Hawaii (1 word); East St Louis (1 word); District of Columbia (1 word).
But:—Clay County (2 words); Missouri River (2 words).

The abbreviation of the above Villages, Towns, etc., are "one word" as if written out in full.
Example:—N Y (word); N Y City (1 word).

The abbreviation Q M or Qm for Quartermaster is "one word"; but Q M C for Quartermaster Corps is "two words."

Every initial letter is "one word."
Example:—A B Jones (3 words); Mr A B Jones (4 words).

The entire surname of a person is "one word."
Example:—A B Jones (3 words); C D VanVleit (3 words); Mr Carl Von Dem Reil (3 words).

The abbreviations of weights and measures in common use are "one word."
Example:—26 lbs (3 words); 2 qts (2 words).

Every figure is "one word."
Example:—726872 (6 words).

Every decimal point is "one word."
Example:—7286.72 (7 words).

Every fractional-bar sign is "one word."
Example:—⅔ (3 words); 22½ (5 words).

Every mark of punctuation is "one word."
Example:—Comma, period, semi-colon, colon, interrogation point, dash, each is one word. But colon dash is two words; and parentheses form two words, each being one word.

The affixes (to the original numbers) "st" "d" "nd" "th" are "one word."
Example:—1st (2 words); 2d (2 words); 2nd (2 words); 15th (3 words).

Letters and groups of letters, when such groups do not form dictionary words and are not combinations of dictionary words, are counted at the rate of 5 LETTERS (or fraction of 5 letters) to "one word."
Example:—Bumchemermunt (3 words).

When groups are made up of dictionary words, each dictionary word will be checked as "one word."
Example:—Comeifyoucan (4 words).

The abbreviations A M, P M, per cent, are each "one word."
Example:—10 A M (3 words); It is O K (3 words); Less 10 per cent (4 words).

Digitized by Google

EXAMPLE OF A PROPERLY CHECKED MESSAGE

	1	2	3	4	5	6	7	8
To:—	Capt.	C	D	Evers	2	9	th	Inf
				9		10		

Mount Hope Canal Zone

	11		12			13			14	15	16	17	18	19	20	21	22	23	24	25	26
	Have		wired		Kansas		City		for	6	5	0	prs	No	6	1	/	2	:	7	:
	27	28	29	30	31	32	33			34		35	36	37	38	39	40	41	42		
	7	1	/	2	and	8	shoes			assorted			at	$	1	,	2	5	0	.	
	43	44	45	46	47	48	49	50		51			52	53	54	55		56			
	0	0	per	M	(	less	1	0	per	cent			for	cash	)	.		Can			
	57		58	59	60	61	62	63		64			65		66			67			
	you		reach	H	L	before	he	leaves		N	Y		and		cancel			former			
	68	69		70		71	72	73	74		75		76		77			78	79		
	order	?		Freight		rate	is	7	6		cents		per		hundred			lbs	.		
	80	81		82	83	84	85		86		87	88	89	90	91		92	93			
	If	O	K	cable	me	Aftin	g		Havana		by	1	0	A	M		the	3	rd		
				(Sig)																	

94	95	96		97
A	P	Downs		Jr
		98	99	100
		Capt	Q M	C

As a **MILITARY MESSAGE** this message properly checks 100 words, and will clearly show the basic principles of checking. However, the common practice is to omit all unnecessary punctuation marks in a message and to spell out the ones necessary to be sent; and it is a logical and sensible practice, because many persons writing a message will fill it full of useless punctuation marks. If, however, a punctuation is sent it should be checked. As a military standard Field Message **must** be sent as written the sending signalist has no option about punctuation marks, so the writer must know not to put them in unless they are vital to the sense of the message.

HOW THE CHECK IS ASSURED

Very few flag signalists know what to do in case the **CHECK is different at the Receiving Station than at the Sending Station**, hence, note this carefully:—

Learn to check any message correctly. Then,

If the Receiver's check of the message is **THE SAME** as the check which the Sender sent him, the Receiver acknowledges the message at once (See "How to Acknowledge").

If the Receiver's check of the message be **NOT THE SAME** as the check which the Sender sent him, the Receiver sends back "Ck (followed by the number he makes the check to be)," now,

(a) If the Sender, **after RECHECKING** the message, sees that the Receiver is correct, the Sender sends back "Ck (followed by the number which the Receiver sent him)" and the Receiver changes the check accordingly and acknowledges.

(b) If the Sender, **after RECHECKING** the message, sees that the check is as he made it in the first place, he sends back "Ck (followed by the same number that he sent in the first place), makes a front, then sends the **FIRST LETTER** of every word that he **COUNTED AS A CHECK WORD**, but makes no fronts between these letters, only a pause at the vertical. The Receiver breaks when he finds the error, and signals the Sender to proceed repeating from that point (by sending back to the Sender the last word he, the Receiver, got correctly) or else he acknowledges.

Now consider the sample message shown in Plate 2, page 40.

The correct check of this message is 28; but, suppose the Receiving Station reads the word "waterworks" as **"water works"** as records it. The check for the Sending Station would be 28, while that for the Receiving Station would be 29, hence the following procedure:—

Instead of acknowledging, the Receiving Station sends back
Ck front 29 front front (and keeps his flag down).

Digitized by Google

The sending Station rechecks, still makes it 28, so sends back as follows:

c k front 2 8 front C O 2 N B 2 2 N I W T M ....etc.

But the Receiver, who expected another W to follow the first one, breaks the Sender when the "T" appears, and sends back, to the Sending Station, as follows:

i n f front (and keeps his flag down).

The Sending Station begins over with "Inf," as follows:

i n f front w a t e r w o r k s front (and would go right on, but Receiver breaks).

When Receiver sees that "waterworks" is all one word instead of two words he sees that the check 28 instead of 29 is correct, so he acknowledges it with

R front 2 front Ad front front front

And the message is finished.

HOW TO ACKNOWLEDGE

TO ACKNOWLEDGE A STATION CALLING YOU

Standard Field Messages and Combat Messages Only:—

Wait until that station SIGNS and LOWERS ITS FLAG, then

Wigwag:—Raise your flag to the vertical position and pause there,—

Semaphore:—Signal "attention."—

Now sign ONCE with the exact symbol or symbols that the calling station used to get into communication with you,—

(a) If that be your true call, make three fronts (or two chop-chops) and keep your flag down; prepare to receive.

(b) If that be not your true call, make one front (or an interval), then sign with your true call; then make three fronts (or two chop-chops), and keep your flag down. This case occurs when the calling station uses the "unknown" call "0," or any collective general call, as "A" for "Artillery."

Example:— [Note:—For meaning of (v) (r) (a) and (n) and the stars see page 58.]

(a) Call is "3," station being called is 3rd Battalion.
Acknowledgement is:—

Wigwag:—(v) 3 * (r)

Semaphore:—(a) (n) 3 * (r)

(b) Call is "Op" (outpost) and station answering is Co. D, 8th U. S. Infantry, occupying part of outpost line.
Acknowledgement:—

Wigwag:—(v) Op * 781 * 14 * (r)

Semaphore:—(a) Op * n 78 (a) I * (n) 14 * (r)

Combat Code Messages Only—

Do not acknowledge until the code message begins to repeat, then acknowledge promptly in the manner described below.

Note:—As the "U" follows promptly after the call of the calling signalist, the receiver knows at once that a Combat Code Message is to follow.

As soon as the code message **begins to repeat**, acknowledge with R (front, or interval) Your own call (three fronts or two chop-chops) but no **personal signature.** However, watch for the sending signalist's sign to ascertain the authority for the mandate.

Thus you acknowledge the call and the message at the same time.

Digitized by Google

TO ACKNOWLEDGE THE RECEIPT OF A MESSAGE

Standard Field and Combat Messages only:—

Wigwag:—Raise the flag to the vertical position and pause there
Signal R and make a front
Sign once with the call of your organization and make a front
Sign the personal signature (first and second, or first and last letters of last name); make three fronts and keep the flag down.

Semaphore:—Signal attention, and from attention go directly to R
Pause at R, make an interval
Sign once with the call of your organization, and make an interval
Sign your personal signature, and make two chop-chops.

Combat-code Message only:—
See page 26, "To acknowledge a station calling you."

HOW TO BREAK

WHEN SENDING, TO BREAK

Wigwag:—The instant you make an error **make a front,** then send EIGHT DOTS, then make a front, then follow directions given below.

Semaphore:—The instant you make an error make an interval, then wave your flag in the position of "D," then follow directions given below. (See "How to make an error sign," page 19.)

Words:—Begin the entire word over. If it be an hyphenated word or a word of two parts and the break occurred in the second part, begin the second part over.

Example:—"Stratford-on-Avon," error occurs in "Avon," begin with "Avon"
"Van Ness," error occurs in "Ness," begin with "Ness"

Numerals:—Begin that particular numeral (not figure) over.

Example:—"13579 24680," error occurs in making 6, begin "24680"; if error occurs in making 2, begin "24680."

WHEN RECEIVING, TO BREAK

Wigwag:—Raise your flag to the vertical position and hold it there until the sender perceives it and lowers his, then follow directions given below. (Note:—If signaling at long distance on a quiet day, use the "attention" signal until seen, instead of the vertical position.)

Semaphore:—Signal "attention" until the sender perceives it and ceases signaling, then follow directions given below.

Words:—Send the last word correctly received by you, not the one in which the error occurred.

Numerals:—Send the first figure of the numeral in which the error occurred. If the error occurred in the first figure, send the last figure of the preceding numeral. If no numeral preceded, send the last word correctly received.

Example:—"13579 24680," error made in receiving 6, send 2; error made in receiving 2, send 9.
"number 135," error made in receiving 1, send n-u-m-b-e-r.

To Break Without an Error Having Been Made:—When, for any reason, you desire to stop the sender for a moment, break in the usual manner, except that, for wigwag, keep your flag at the vertical position.

To Start Sender Again:—For wigwag, merely lower your flag. For semaphore, signal "Attention, Ga"

When Sender Fails to Understand Your Break:—Break again, but this time send him some distinct word further back in the message, so he can get co-ordinated.

The Use of Fronts as Breaking Points:—It is not always necessary to send back a word, many times sending back the last "front" will suffice. If the break occurs in the address and the entire address is desired sent over, the receiver need only send back the double-dash that marks the end of the address and the sender will begin the address again.

WHEN SENDING, AND THE RECEIVER BREAKS

Stop sending the instant you notice the Receiver breaking, then lower your flag or remove semaphore flags from view.

Digitized by Google

Read and record what the Receiving Signalist sends back to you. When he has finished and has lowered his flag, send him exactly what he sent to you and go right on sending the message from that point.

If the Receiving Signalist breaks promptly, as he should, you may expect to receive from him the word just before that on which he broke.

Example:—The Sending Signalist is sending

"...the invoice numbers referred to are 13579 24680..."

and the Receiver breaks on "numbers"

The Receiver breaks and sends back "invoice"

The Sender begins "invoice" and goes right on from there.

If the Receiver breaks on "6" he sends back "2" and the sender begins "2"; if he breaks on "2" he sends back "9" and the sender begins "9 front"; if he breaks on "5" he sends back "1" and the sender begins "1"; if he breaks on "1" he sends back "are" and the sender begins "are."

WHEN RECEIVING, AND THE SENDER BREAKS

Discontinue what you were recording and begin it again.

Example:—The Sending Signalist is sending

"...the invoice numbers referred to are 13579 24680..."

and the sender breaks on "b" of "numbers"

The sender breaks (front eight dots front) and begins "numbers" over again.

If the sender breaks on "6" he begins "2"; if he breaks on "2" he begins "2" (not "9," notice); if he breaks on "5" he begins "1"; if he breaks on "1" he begins "1" (not "are," notice).

And the Receiver, familiar with what the correct procedure is, records understandingly.

REASONS FOR CALLS AND SIGNS

It is as vitally necessary that an organization, patrol, outpost, etc., should have a FLAG NAME by which it may be CALLED BY FLAG as it is for a person to have a name by which we may distinguish him.

When our organizations use standard calls and signs throughout the entire service we may expect to see practical results with the flag, and not until.

The author has endeavored to provide a system of calls and signs which will enable signalists to differentiate any organization, outpost, field train, etc., in the service from that of any other, and to make this system such as to require the least amount of memory.

Due to the fact that letters have been used by the different branches of the service for battlefield mandates it has been necessary to use numerals to avoid possible confliction. For example, it would be dangerous to call "C" Company with "C" when this letter means CHARGE, and might be so construed by some nearby organization.

These calls and signs follow logical rules in their composition, for example:—

The largest organizations are each given a single numeral, and the larger the organization the greater that numeral, so the Division is 9.

The designation of companies, troops, and batteries is "such battalion (or squadron), such company (troop or battery)." Hence Company (Troop or Battery) "A" is 11 (1st Battalion 1st Company). But, as Artillery regiments have only two battalions it is considered better for Batteries "D," "E," and "F" to retain the same call as that designated for companies and troops of like letter designation.

Letter calls must be used, and are so used as to avoid possible confliction, namely:—

A single letter denotes a Branch of the Service

Two letters denote one of the following three classes:

One branch of the United States Services

One of the States or Territories

Miscellaneous troops.

By combining these classes of calls we can form combinations in a logical manner which, when we NEED them, we can use to differentiate

Digitized by Google

any body of troops, but unless we do need to clearly define an organization we use the simplest call that will "call" it.

In regard to combinations of call factors there is the following rule to remember:—

NUMERALS precede LETTERS, and the FIRST NUMERAL is that of the GREATEST ORGANIZATION. Where a numeral is joined to a letter combination it merely defines that letter call, but when separated by an "interval" such letter combination defines the numeral.

The following examples will illustrate how complex calls are built up from a simple one in logical sequence:—

Regiment	7
23rd Regiment	723
23rd Regiment New York	723ny
23rd Regiment New York Cavalry	723nyc
Regiment of Cavalry	7c
23rd Regiment of Cavalry	723c
Also	
3rd Battalion Outpost	3 * Op
Outpost No. 3	3Op

Complex calls very rarely need be used, it being merely necessary to call "7" if one wants one's regimental signalist to answer. But, where troops are massed and many regiments present and a distant signalist desires to communicate with a certain regiment he will need to clearly define what regiment he desires, and where this becomes necessary means are provided to enable him to accomplish the result. For this reason signalists should familiarize themselves with the combination of call factors even though they may seldom be required to put this knowledge into effect, and examples are given to assist them to do so.

The call of any organization is exactly the same as its sign. That is, it has one symbol by which it can be called, and the same symbol is used by it when it defines its identity by its sign. But, any organization replying to a general call, such as "4" or "0" would sign with its own defining call, and not with "4" nor with "0."

Besides clearly defining the organization, standardized calls permit of identification of PERSONS if they are the commanders of organizations, and a call for "21" carries the meaning "here is a message for the COMMANDING OFFICER OF COMPANY "E"; likewise, if a signalist signs "7" we understand that THE REGIMENTAL COMMANDER issued that message. This permits the use of a new type of battlefield message devised by the author termed the COMBAT MESSAGE, which message greatly reduces the number of characters that need to be sent by means of the flag to convey the desired information.

Therefore, it must be apparent to the student signalist that CALLS AND SIGNS ARE THE VERY BACKBONE OF SIGNALING.

HOW TO CALL AND TO SIGN

For Standard Field and Combat Messages:—

To Call an Organization:—Using that organization's **simplest distinguishing call-symbol,** call **three times** with that symbol, then sign **once** with your own **simplest** call-symbol. Make a front (or interval) between each call, and make two fronts (or one chop-chop) between the last call and your own sign; make three fronts (or two chop-chops) after your sign, and keep your flag down. See examples.

You must use your judgment as to whether you may call an organization (for example, a regiment) with merely "7," or whether you must completely distinguish that regiment. It is all a question as to whether there are other **similar** organizations near enough to you to read your call, for, if so, you must clearly distinguish what organization you wish.

For example, you desire to communicate with the 1st U. S. Volunteer Cavalry [for meaning of stars see page 56]: —

If you belong to this regiment and there are no other regiments anywhere near you, call is ..... 7 *

If there is an infantry regiment near you, and close enough to be confused with your call of 7, the call may be 7C*

Digitized by Google

If there are other Cavalry regiments near you close enough to be confused with 7C, the call may be .....71* unless one of these regiments is an Infantry regiment, when your call could be 71C*

If you desire to communicate with a company of your own regiment and the same lettered company of another regiment is **not** present (as for example, Company D), call is ....14* If, however, there are other companies, troops, or batteries present with like letter designation you must first get your call to the proper regiment, then to the company of that regiment, and the regimental call precedes that of the company. For example, Company D 5th Infantry 75I*14*

The above principles hold true for all calls, such as Op, Ag, Lm, 6, 5, Pak, etc.

In calling, when necessary to use a call of more than one factor, the following principles govern:—

The organization to which that unit belongs is given **first**, then a front (interval), then the call of the unit. For example, Field train 12th Cavalry .....712C * 6 * (i. e., Regiment, 12th Cav., field train).

In all cases, a numeral factor precedes a letter factor. For example, Advance Guard of Company D .....14 * Ag * (i. e., Co. D, Advance Guard).

A numeral factor, **separated from** a letter factor by a front (interval), means that such numeral is used as an organization call. Examples:—

All patrols within sight ..... 4 * Pl *
3rd Battalion's Outpost ..... 3 * Op *
Brigade field train ..... 8 * 6 *

A numeral factor, **joined to** a letter factor without any intervening front (interval) means that such numeral is a qualifying numeral only. Example:—

The 4th Patrol (or No. 4 Patrol) ..... 4Pl *
No. 3 Outpost ..... 3Op *

When joined to another numeral, the first one designates the size of the organization to which the unit is attached.
Example:—

The 6th Brigade ..... 86 *

Compare these examples with the ones just above.

The "Branch of the Service" letter is added to a State Abbreviation as its **third letter.** Examples:—

Mass. Inf.... Maí; Mass. Cav.... Mac; Mass. Eng.... Mae; Mass. Sig. Corps.... Mas

Usually state abbreviations should not be used.

For Combat-code Messages:—

The above principles and rules governing Standard Field and Combat Messages also hold true for Combat-code Messages except that—

The Calling Signalist calls, sends his message, and then signs, without waiting for an acknowledgement. Hence the use of "U" to prevent the Receiving Signalist from breaking in to acknowledge. See "The Combat-code Message," page 31.

To Call Several Organizations at One Time:—

All Messages:—

Use the "All Troops" call, 4, in exactly the way any other call is used.

Standard Field and Combat Messages:—

Or, call one organization and be acknowledged, repeat its acknowledgement, then signal attention and call the next one, and so on till all have acknowledged, then send the message to all at once.

Note:—In sending the message, if any one organization breaks, the **sender** must make the break signal just as though he had made the error himself, then send the word over.

Digitized by Google

Combat-code Message:—

Or, signal "attention," call each organization one after the other (separating each call from its preceding call by a "front" or an "interval"), then give two fronts (or one chop-chop), signal "U," then send the combat-code mandate. Then give three fronts (or two chop-chops) and sign. Watch for acknowledgements.

Examples:— [For meaning of (v) (a) (n) (r) and stars see pages 56 and 57.]

To call 11 and sign 21

Wigwag:—(v) (a) * 11 * 11 * 11 * 21 * (r)

Semaphore:—(a) (n) 11 * 11 * 11 * (n) 21 * (r)

To call 76 11 and sign 74C

Wigwag:—(v) (a) * 76 * 11 * 76 * 11 * 76 * 11 * 74C * (r)

Semaphore:—(a) (n) 76 * 11 * 76 * 11 * 76 * 11 * (n) 74 (a)C * (r)

To call 771Nyi 3 and sign 72Vtc 22

Wigwag:—(v) (a) * 771Nyi * 3 * 771Nyi * 3 * 771Nyi * 3 * 72Vtc * 22 * (r)

Semaphore:—(a) (n) 771 (a) Nyi * (n) 3 * 771 (a) Nyi * (n) 3 * 771 (a) Nyi * (n) 3 * (n) 72 (a) Vtc * (n) 22 * (r)

To call Companies A, B, and C (but not D) in Combat-code signaling only, and sign 1

Wigwag:—(v) (a) * 11 * 12 * 13 * 11 * 12 * 13 * U *...etc... * 1 * 1 * 1 * 1 *

Semaphore:—(a) (n) 11 * 12 * 13 * 11 * 12 * 13 * U * ...etc... * 1 * 1 * 1 * *

Example of Combat-code Call, Sign, Message, and Acknowledgement:—

Battalion Commander desires to notify Co. "C" to halt and commence firing:

Wigwag:—(v) (a) * 13 * 13 * 13 * U * H * F * H * F * H * F * ...etc... * 1 * 1 * *

Semaphore:—(a) (n) 13 * 13 * 13 * U * H * F * H * F * H * F * ...etc... * 1 * 1 * 1 * 1 *

Acknowledgement, as soon as message is understood,

Wigwag:—(v) R * 13 *

Semaphore:—(a) R * (n) 13 *

Digitized by Google

CALLS AND SIGNS

NUMERAL CALLS AND SIGNS

Large Units

Division	9	Field train	0
Brigade	8	Machine guns (or machine gun company)	5
Regiment	7	All troops	4
Battalion (squadron)		Unknown troops	0
First	1		
Second	2		
Third	3		

Companies, Troops, and Batteries

1st Battalion		2nd Battalion		3rd Battalion		Regiment	
Company or Troop:—							
A	11	E	21	I	31	Hdq. Co.	35
B	12	F	22	K	32	Supply Co.	36
C	13	G	23	L	33	Machine Gun Co.	5
D	14	H	24	M	34		
Batteries:—							
A	11	D	14				
B	12	E	21				
C	13	F	22				

Note:—Batteries of Field Artillery use the same calls as do Companies and Troops of LIKE LETTER DESIGNATION.

Platoons:—

Give the company, troop, or battery call and add the number which represents the serial order of the platoon in such company, troop, or battery. For example:—

2nd Platoon of Company "C" 132
Or, when not confusing to other troops 2Pn

Sections and Squads:—

As given for platoons, adding the section or squad serial number to the platoon. Preferably, however, call as follows when not confusing to other organizations:

2nd Section 2Se
3rd Squad 3Sd

LETTER CALLS AND SIGNS

ONE LETTER

Branch of the Service

Artillery, field, any type	A	Engineers	E
Cavalry	C	Hospital (or Sanitary) Troops	H
Infantry	I	Signal Corps	S
		Quartermaster Corps Troops	Q

TWO LETTER

The United Services

Army (mobile troops)	Ay	National Army	Na
Navy (exception)	Nvy	Reserve Corps	Rc
Marine Corps	Mc	Philippine Scouts	Ps
Coast Artillery	Ca	Porto Rico Troops	Pr

Troops With State Designations

State	Flag Abbreviation	State	Flag Abbreviation
Alaska	As	California	Cr
Alabama	Ab	Colorado	Cl
Arizona	Az	Connecticut	Cu
Arkansas	Ak	Delaware	De
Canal Zone	Cz	District of Columbia	Dc

Digitized by Google

Florida	Fd	North Carolina	Nc
Georgia	Gr	North Dakota	Nd
Idaho	Id	Ohio	Oh
Illinois	Il	Oklahoma	Ok
Iowa	Ia	Oregon	Og
Kansas	Ks	Pennsylvania	Pa
Kentucky	Ky	Porto Rico	Pr
Louisiana	La	Philippine Islands	Pi
Massachusetts	Ma	Rhode Island	Ri
Maryland	Mn	South Carolina	Sl
Maine	Me	South Dakota	Sa
Minnesota	Ms	Tennessee	Te
Mississippi	Mi	Texas	Tx
Michigan	Mh	Ter. of Hawaii	Th
Missouri	Mo	Utah	Ut
Montana	Mt	Virginia	Va
Nebraska	Nb	Vermont	Vt
Nevada	Nv	Washington	Wa
New Hampshire	Nh	Wisconsin	Ws
New Mexico	Nx	Wyoming	Wy
New York	Ny	West Virginia	Wv
New Jersey	Nj		

Note regarding this table:—Every State and Territory is abbreviated to two letters; these have been selected so as not to conflict with other 2-letter abbreviations, nor dictionary words.

MISCELLANEOUS TROOPS

Ambulance Company	Ac	Led Horses	Lh
Advance Guard	Ag	Outpost	Op
Battalion	Bn	Patrol	Pl
Battery	By	Platoon	Pn
Company	Co	Point	Pt
Detachment	Dh	Rear Guard	Rg
Dressing Station	Ds	*Section	Se
Field Hospital	Fh	Signal Station	Ss
Flank Guard	Fg	Squad	Sd
First Aid Station	Fs	Squadron	Sq
Guns	Gn	Troop	Tr
Headquarters	Hq	Trench Mortars	Tm
Hand Grenades	Hg	Reserve	Rv
Caissons	Cn	Support	Su
Limbers	Lm	Regimental Station	Rs

*"Se" is used instead of "Sn" which means "Sanitary."

THREE LETTER

These Abbreviations are known as the **"Field Train Letters"** because they are intended for use only in calling trains.

Ambulance	Amb	Pioneer section	Pio
Ammunition section	Amm	Ponton section	Pon
Baggage section	Bag	Radio section	Rad
Bridge train	Bri	Ration section	Rat
Combat section	Com	Supply train	Spn
Detachment train	Dtn	Telegraph section	Tel
Field Hospital train	Hos	Aviation train	Avi
Pack train	Pak	Q. M. C. train (any kind)	Qtn

Note:—The "Branch of the Service," "Miscellaneous Troops," and "Field Train Letters" calls should be committed to memory; the other letter calls need not be memorized.

Digitized by Google

EXAMPLES ILLUSTRATING THE USE OF CALLS

DIVISION

Division .....9 *	Divisional Artillery .....9 * A *
Cavalry Division .....9C *	Divisional Cavalry .....9 * C *
2nd Division .....92 *	Engineers of the Division ..9 * E *
2nd Cavalry Division .....92C *	Trains of the Division .....9 * 6 *
Division (anything) .....9 *	(abbreviation of what is desired) *

BRIGADE

Brigade .....8 *	Unknown Brigade .....08 *
Infantry Brigade .....8I *	Unknown Inf. Brigade .....08I *
Cavalry Brigade .....8C *	Brigade of Mass Inf. ....8Mai *
2nd Brigade .....82 *	6th Brig. Mass. Inf. .....86Mai *
2nd Cavalry Brigade .....82C *	6th Brig. Cav. .....86C *
Art. of the Brigade .....8 * A *	6th Brig. .....86 *
3rd Brig. of 2nd Div. ....92 * 83 *	Ammunition Sections of Brigade
Brigade Trains .....8 * 6 *	Field Train .....8 * 6 *Amm*
Brigade Outpost .....8 * Op *	Brigade (anything) .....8 *
Brig. Field Hosp. No. 1 ..8 *1Fh *	(abbreviation of what is desired) *

REGIMENT

Regiment .....7 *	Unknown Cavalry Reg. .....07C *
Unknown Regiment .....07 *	Regimental Outpost .....7 * Op *
Artillery Regiment .....7A *	Regimental Adv. Guard ..7 * Ag *
127th Regiment 7127	Regimental Signal Station ..7 * Ss *
6th Regiment .....76 *	3rd Cav. Regl. Signal Station
Trains of the Reg. .....7 * 6 *	.....73C * Ss *
15th Inf. .....7151 *	Reg. Field Train Combat Sect.
Reg. Field Train, Bag. Sec.	.....7 * 6 * Com *
.....7 * 6 * Bag *	4th Inf. Field Tn., Ration Sec-
10th Cav. Field Train ..710C * 6 *	tion .....74A * 6 *Rat *
10th Conn. Inf. Field Train	1st Pn. Reg. Machine Guns
1st Cav. Field Train .....71C * 6	..... 7 * 51 *
Regimental Machine Guns ..7 * 5 *	1st Pn. 2nd Cav. Mach. Guns
Prov. C. A. C. Reg. of Inf. 7Cai *	.....72C * 51 *
3rd Prov. C. A. C. Reg. (Inf.)	
.....73Cai *	
Regimental (anything) .....7 *	(abbreviation of what is desired) *

BATTALION OR SQUADRON

1st Battalion .....1 *	2nd Battalion, Outpost ...2 * Op *
2nd Battalion .....2 *	3rd Squadron's Field Train 3* 6 *
3rd Squadron .....3 *	Battalion Combat Section Bn* Com*
Unknown Battalion .....OBn *	1st Battalion Ration Sect. 1 * Rat *
Battalion .....Bn *	3rd Bn. 22nd N. Y. Inf. 722 Nyi* 3*
Battalion (anything) .....Bn *	(abbreviation of what is desired) *

COMPANY, TROOP, BATTERY

Company .....Co *	Detachment of Co. B ....12 * Dh *
Troop .....Tr *	Battery E, 6th F. A. ....76A * 21 *
Battery .....By *	Troop A, 1st Cav. .....71C * 11
Hdqrs. Company 35	Company I, Signal Corps ..31 * S *
Company E .....21 *	All of Company D .....414 *
Troop E .....21 *	Company Field Train .....6 * Co *
Battery E (not 22) .....21 *	Company Pack Train ...Co * Pak *
Unknown Company .....OCo *	Co. C Pack Train .....13 * Pak *
Unknown Troop .....OTr *	Pack Tn. Co. C, 23rd Inf.
Unknown Battery .....OBy *	..... 723I * 13 * Pak *
Company (anything) .....Co *	(abbreviation of what is desired) *

Digitized by Google

FIELD TRAINS

Our Field Train .....6 *
Any undefined Field Tn. ....6 *
1st Section of our F. Tn.... ..61 *
3rd Bn's Field Train .....3 * 6 *
F. Tn. of 1st F. A. N. Y. Inf. .....71Nyi * 6 *
Unknown Field Train .....06 *
Field Train, Ration Sec. 6 * Rat *
Brigade Field Train .....8 * 6 *
Regimental Field Train ....7 * 6 *
Battalion Field Train ....6 * Bn *
Company Field Train .....6 * Co *
Artillery Field Train .....6A *
All Field Trains .....46 *

MACHINE GUNS

Machine Gun Company .....5 *
Any undefined Machine Guns ..5 *
Cavalry Machine Guns .....5C *
6th Cav. Mach. Guns ..76C * 5 *
1st Platoon (M. G. Co.) .....51 *
Unknown Machine Guns .....05 *
All Machine Guns .....45 *
All Cav. Mach. Guns ....4C * 5 *
Machine Guns of the 69th Iowa Inf. .....769Iai * 5 *

COAST ARTILLERY

When serving as such:
125th Co., C. A. C. .....125Ca * 6th Co., C. A. C. .....6Ca *
When serving as provisional infantry:
125th Co., C. A. C., as 1st Co., 1st Bn. .....11 *
6th Co., C. A. C., as 3rd Co., 2nd Bn., of 1st Prov. Reg. .....71Cai * 23 *

ENGINEERS, SIGNAL CORPS

Company D .....14 *
Company D, Eng. Corps ..14 * E *
Company D, Sig. Corps ...14 * S *
Mass. Engineers .....Mae *
3rd Reg., N. Y. Eng. .....73Nye *
1st Bn., N. J. Sig. Corps 1Bn* Njs*
Connecticut Signal Troops ...Cus *

SANITARY TROOPS

Ambulance Company .....Ac *
1st Amb. Company 1Ac*
1st Amb. Co., N. Y. N. G. .....1Ac * Nyh *
Dressing Station .....Ds *
Field Hospital .....Fh *
2nd Field Hospital .....2Fh *
2nd Field Hosp., N. Y. 2Fh * Nyh *
First Aid Station .....Fs *
20th U. S. Inf. First Aid Station .....720I * Fs *

PLATOONS

Unknown Platoon .....OPn *
Undefined Platoon .....Pn *
All Platoons .....4 * Pn *
Infantry Platoon .....I * Pn *
2nd Platoon, Machine Guns ..52 *
3rd Platoon of 125 Co., C. A. C., serving as such .....125Ca * 3Pn *
3rd Platoon of 125 Co., C. A. C., serving as 2nd Co., Prov. Bn. ....123 *
3rd Platoon .....3Pn *
3rd Platoon, Co. B .....123 *
3rd Plat., Co. B, 6th Inf. 761 * 123 *
3rd Plat., Co. B, Sig. Corps .....123 * S *

SECTIONS

3rd Section .....3Se *
All Sections .....4 * Se *

SQUADS

4th Squad .....4Sd *
All Squads .....4 * Sd *
Unknown Squad .....OSd *
All Squads, Co. A (Call with 4 * Sd * and sign with 11)

OUTPOSTS, PATROLS, ETC.

Examples are given for **outpost** only, for others substitute for "Op" as follows:

Patrols .....Pl
Point .....Pt
Advance Guard .....Ag
Rear Guard .....Rg
Support .....Su
Flank Guard .....Fg
Signal Station .....Ss
Field Hospital .....Fh
Ambulance Company .....Ac
Dressing Station .....Ds

Digitized by Google

First Aid Station .....Fs
Reserve .....Rs
The Outpost .....Op *
Brigade Outpost .....8 * Op *
Regimental Outpost .....7 * Op *
Battalion Outpost .....Bn * Op *
Cavalry Outpost .....C * Op *
Infantry Outpost .....I * Op *
Unknown Outpost (zero) ....OOp *

All Outposts .....4 * Op *
1st Battalion Outpost ....1 * Op *
Company Outpost .....Co * Op *
Company B Outpost .....12 * Op *
Entire Outpost .....4 * Op *
Outpost, 4th Brigade ....84 * Op *
Outpost, 6th Regiment ..76 * Op *
Outpost No. 3 .....3Op *
Outpost, 3rd Battalion ....3 * Op *

USE OF THE NUMERAL 4

All troops within sight who are under the command of person signing, 4 *
All Field Artillery Troops ..4A *
All Regiments .....47 *
All Trains .....46 *
All Led Horses .....4 * Lh *
All 3rd Squadron's Led Horses .....43 * Lh *
All 1st Battalion's Patrols 41 * Pl *
All (anything) .....4 * (abbreviation of what is desired) *
Note:—4 is used as a **CALL** only.

All Infantry Reserves ....4I * Rs *
All Battalions .....4 * Bn *
All Machine Guns .....45 *
All Ration Sections ....46 * Rat *
All 2nd Brigade Trains..482 * 6 *
All the 22nd U. S. Inf..... 4722I *

THE USE OF THE NUMERAL 0

Exactly as given above for 4, except that it is joined to the abbreviation following it, instead of being separated therefrom by a front or an interval. Example: All Battalions....4 * Bn *; Unknown Battalion....OBn *. The letter "O" is not used **alone**, hence when "O" appears alone or joined to the front of an abbreviation in the text it is **ZERO**, not the LETTER. It is used as a **CALL** only.

TYPES OF FLAG MESSAGES

We already have two types of message that can be sent by means of the flag, the Signal Corps Field Message, and the letters used by the different branches of the service for combat mandates.

The former follow a standard form, while the latter follow no form at all and are guided by no directions.

For sake of uniformity and co-ordination the author has presented a method of handling these battlefield letter mandates which will tend to lessen the liability of confusion and provide the signalist with a definite form to go by in handling them, thus operating for greater speed and surety. The author has termed this the "COMBAT-CODE MESSAGE."

The author presents a third and wholly new type of message for the use of troops of the line during combat. This is termed the COMBAT MESSAGE, and is designed to take the place of the Field Message within organizations on the battlefield and reduce the number of characters to be sent by means of the flag.

These three types of messages are separately described under the headings

Standard Field Message.
Combat Message.
Combat-Code Message.

The Signal Corps furnishes one type of message blank only to the Army, and this blank is designed to meet the requirements of wire lines, radio, and messenger service as well as that of the flag. This is known in the text as the **STANDARD FIELD MESSAGE.**

Where stations are **NOT** within sight of one another, or when a messenger delivers a message, the **LOCATION** of the sender must be entered on the blank and actually sent (by wire or other means); but in the case of the flag, where the receiving station must be within sight of the sending station, and where 99 times out of every 100 the location of the sending and the receiving signalists is identical with the locations of the writer and the recipient of that message it is a great waste of

Digitized by Google

time to burden the message with a long and unnecessary preamble, address, and signature.

The writer therefore presents the COMBAT MESSAGE as a type of message best suited to flag use, especially as regards interior regimental signaling. The **COMBAT MESSAGE** can exist in its best form only if the troops using it also use a definite and standard system of **CALLS** and **SIGNS.**

There are plenty of occasions when the Standard Field Message should be used in preference to the Combat Message, and it is here thoroughly explained, as well as the Combat and Combat-code Messages.

STANDARD FIELD MESSAGE

Few persons who use it, thoroughly understand the Standard Field Message. This will teach its use and explain some points about the message which are usually not well understood.

Refer to Sample Message, page 40.

ON BEING HANDED THE MESSAGE

Read every word of it. See that it is addressed and signed. Call the writer's attention to any errors found or any omissions. If it contains unnecessary punctuation marks ask the writer if you may omit them. Mark it how sent. In the upper left hand corner enter the date and hour it was handed to you, as 7/25/17/810Am, meaning, July 25, 1917, at 8:10 A. M. Check it and enter the check in the upper right hand corner, and if a reply is desired put an "X" there, to be signaled. Number it serially as regards the station which is to receive it; for example, if you have sent 20 messages already that day but only 10 of them to the flag station which is to handle this message, its number will be 11. In the "Sent by" square enter the numeral (or numerals) which represent YOUR SIGN, for example, if you are Colonel Brown's orderly your sign is the call of the Regimental Commander, or 7; right after the sign just written enter the two letters which are YOUR PERSONAL SIGNATURE (usually the first and last letters of your last name, or the first and second letters, as "Jo" for Jones"). Now file the message until you have called and been acknowledged by the station which is to receive it. Then proceed as given in next heading.

ON SENDING A MESSAGE

After you have called and been acknowledged in the proper manner (see "How to Call and to Sign" and "How to Acknowledge") take the message from the file. Look at your watch and enter the time so given in the first or left-hand "Time" square, at the same time calling "NR, n-r, FIGURES, ELEVEN, 1-1" etc., to your assistant who stands waiting to flag-signal that message. Complete the entire message and give **three fronts,** and immediately look at your watch. Enter the time so determined in the second or right-hand "Time" square. Watch for the acknowledgement, read it when it comes, and enter the "2 Rm" (see next subhead) in the "Rec'd by" square and your message is finished.

ON RECEIVING A MESSAGE

While your assistant is acknowledging the call, take out your message book and pencil and be ready to record as soon as your assistant begins to call the letters. At the instant the "Nr, etc." comes refer to your watch, and enter the time your watch records in the first or left-hand "Time" square, as "812 Am." If you are receiving the message shown, you may expect to receive "Nr 11 7 Jo Ck 28 Ofm Fm Comdg . . . . " etc.; hence you will notice the message comes to you in the following sequence (1) Nr, and the number, or 11; (2) The sending station's Call and that operator's Personal Signature, or "7 Jo"; (3) The Check, or "Ck 28 Ofm"; (4) Fm, etc. (For exact details see next subhead). You

Digitized by Google

continue to receive and to record the entire message until you receive the signature followed by **three fronts**, when you know the message is finished. You then check the message, and if the check is correct, you acknowledge with "R front (or interval), 2 front (or interval) Rm three fronts (or two chop-chops)" which you will notice is equivalent to saying "I received you, I am orderly for Bn Comdr of 2nd Bn, and my Personal Signature is Rm (my name being Rohm). And you at once enter the "2 Rm" in the "Rec'd by" square, and the time by your watch in the second or right-hand "Time" square. You write nothing in the space "Time Filed" in the upper left-hand corner, but enter "Flag" in the space "How Sent."

ORDER IN WHICH A MESSAGE IS SENT

Refer to the message on page 40.
Signal "Attention!" for a moment and stop at the vertical, make a front.
Call with—2 front 2 front 2 front front.
Sign with—7 front front front and keep your flag down.
Wait for acknowledgement.

On being acknowledged enter time "812Am" as shown, then
Nr * 11 * 7 * ro * ck * 28 * ofm * fm * comdg * officer * 22nd * inf * at * hill * 102 * 25 * ho * 805 * am * nr * 12 * [WIGWAG Double DASH; SEMAPHORE 1 Chop-Chop] to * comdg * officer * 2nd * bn * 22nd * inf * waterworks * tobin [WIGWAG Double Dash; SEMAPHORE 1 Chop-Chop] move * your * battalion * to * edge * of * woods * reinforcing * the * first * battalion * on * its * left * flank [WIGWAG Double Dash; SEMAPHORE 1 Chop-chop] sig * brown * colonel *

HOW A STANDARD FIELD MESSAGE IS "CALLED" TO BE RECORDED

For accurate and speedy work, one operator should read the message and call it to his assistant who handles the flag and who acts only as a machine, whose function is merely to make each letter and character EXACTLY as it should be made.

SEMAPHORE: This is not so essential for semaphore as it is for wigwag. If there are two operators handling a semaphore message one should call an entire WORD while the other makes that word, but a semaphore operator can handle a message alone.

WIGWAG: It is almost impossible for ONE MAN to handle a wigwag message alone and do so without loss of time, either in sending or in receiving, but especially the latter.

The following method is therefore given WIGWAG operators to enable them to send a message quickly and with precision.

The word in CAPITALS is the word that the calling operator SPEAKS to the operator handling the flag, while the small letters represent each letter spoken to such operator immediately after which he is expected to make that character with his flag. The purpose is to notify the flagman what to expect, and then to spell it out for him in detail as he signals each character.

Consider the message shown in Plate 40.

It is presumed that the distant station has acknowledged. To illustrate how a BREAK is called, it is presumed that the RECEIVING SIGNALIST breaks on the word "edge" (that is, fails to read "edge" correctly) and that the No. 1 Operator (he who IS CALLING THE MESSAGE) breaks on the word "left" (that is, he starts to call "right" instead of "left" and corrects his error only after No. 2 has sent "rig" of the word "right." To illustrate how the check may be assured, when wrongly received, it is supposed that the RECEIVING SIGNALIST reads "Waterworks" as TWO words (Water Works) and consequently checks 29 instead of 28.

Digitized by Google

No. 1 would therefore call the message as follows, No. 2 making the characters. No. 1 waits until No. 2 makes the letter just called before he calls the next one:

NUMBER n r FRONT ELEVEN FIGURES 1 1 FRONT FIGURES 7 FRONT JO j o FRONT CHECK c k FRONT FIGURES TWENTY-EIGHT 2 8 FRONT OFM o f m FRONT FROM f m FRONT COMMANDING c o m d g FRONT OFFICER o f f i c e r FRONT TWENTY SECOND FIGURES 2 2 n d FRONT INFANTRY i n f FRONT AT a t FRONT HILL h i l l FRONT ONE HUNDRED AND TWO FIGURES 1 0 2 FRONT DATE TWENTY-FIVE FIGURES 2 5 FRONT HOUR h o FRONT EIGHT-O-FIVE FIGURES 8 0 5 FRONT AM a m FRONT NUMBER n r FRONT TWELVE FIGURES 1 2 FRONT DOUBLE DASH FRONT
ADDRESS TO t o FRONT COMMANDING c o m d g FRONT OFFICER o f f i c e r FRONT SECOND FIGURES 2 n d FRONT BATTALION b n FRONT TWENTY-SECOND FIGURES 2 2 n d FRONT INFANTRY i n f FRONT WATERWORKS w a t e r w o r k s FRONT TOBIN t o b i n FRONT DOUBLE-DASH FRONT
MESSAGE MOVE m o v e FRONT YOUR y o u r FRONT BATTALION b a t t a l i o n FRONT TO t o FRONT EDGE e d g e FRONT OF o .....
(By No. 1 ....."DOWN")
(By No. 2 ....."t o FRONT")
(By No. 1 ....."UP")
TO t o FRONT EDGE e d g e FRONT OF o f FRONT WOODS w o o d s FRONT REINFORCING r e i n f o r c i n g FRONT THE t h e FRONT FIRST f i r s t FRONT BATTALION b a t t a l i o n FRONT ON o n FRONT ITS i t s FRONT RIGHT r i g .....
FRONT BREAK FRONT (sender makes "break")
LEFT l e f t FRONT FLANK f l a n k FRONT DOUBLE-DASH FRONT SIGNATURE s i g FRONT BROWN b r o w n FRONT COLONEL c o l o n e l FRONT FRONT FRONT

and they watch for acknowledgement, but receivers got a different check from the one sent, hence, No. 2, who is ready to call the distant station, sees their flag rise to vertical, and he calls to his No. 1 what the distant station sends, which is

c k FRONT 2 9 FRONT

No. 1 rechecks, still makes his check 28, and calls as follows:

CHECK c k TWENTY-EIGHT FIGURES 2 8 FRONT FIRST LETTERS OF CHECK c o 2 n b 2 2 n i w t m .....

but the distant station raises its flag, and No. 2 calls "BREAK" and reads

i n f FRONT

So No. 2 starts with "Inf" and begins to call

INFANTRY i n f FRONT WATERWORKS w a t e r w o ....

but No. 2 calls "BREAK" and reads

r FRONT 2 FRONT r m FRONT FRONT FRONT.

The reader will note that the distant station had read "waterworks" as TWO words, so was expecting to see another "w" follow the first one, but when the next letter was "t" it was evident that "waterworks" was ONE WORD, hence the error. The receivers then broke and caused the senders to start back behind "waterworks" and send through it to be sure, then broke and acknowledged. Had they not broken, the senders would have gone right on to the end of the message.

INCOMPLETE STANDARD FIELD MESSAGE

The flag student must not think that a Standard Field Message, to be one, must have a full preamble. Although most such messages should have a complete preamble the writer need not enter the person "from" and the place "at," the "date," "hour," "number," etc., if he does not desire, and we may find that the message goes directly from the

Digitized by Google

TIME FILED	NUMBER	SENT BY	TIME SENT	RECD. BY	TIME RECD.	CHECK
7/25/17 8:10 A. M. ~~P. M.~~	Nr 11	T Jo	8:12 A. M. ~~P. M.~~	2 Rm	8:20 A. M. ~~P. M.~~	Ck 28 Ofm

FM Comdg. Officer 22nd Inf. FROM

AT Hill 102

DATE	HOUR	WRITER'S NUMBER	HOW SENT
July 25 1917	Ho 8:05 A. M. ~~P. M.~~	Nr 12	Flag

TO Comdg. Officer 2nd Bn 22nd Inf.
Waterworks Dobin

Move your battalion to edge of woods reinforcing the First Battalion on its left flank.

Brown, Colonel.

Digitized by Google

PLATE II

CHECK to the ADDRESS, totally without any preamble. Hence the necessity for the "double dash" (or one chop-chop) after the preamble, or, that is, JUST BEFORE THE ADDRESS.

Also, any one of the above may be omitted, and the Receiver must keep himself co-ordinated to keep from being confused. For example, very few persons write THEIR OWN NUMBER after the "No" (or on the blank shown herein, "nr") provided for them as the last thing of the preamble; also, the date is often not filled in.

In regard to the date, the flag student will notice that only the figure which represents the date is usually sent, not the complete "July 25 1917" but merely the "25." However, if this date be not in the current month the entire date is sent.

THE COMBAT MESSAGE

It takes a long time, at best, to send any message by means of the flag, and on the battlefield or in campaign, time is precious, especially when the signalist is exposed to fire.

So the author has stripped the Field Message of all it contains that IS NOT NECESSARY IN BATTLE, has used the CALL to designate for whom the message is intended, and the SIGN from whom it originated, and has termed the result the COMBAT MESSAGE.

The COMBAT MESSAGE is essentially the message to use for inter-regimental FLAG signaling.

The message is very simple. If the Commanding Officer of the 3rd Battalion causes his flag signalist to call Company "K" and sends a message to that company, is it not logical that the message should be delivered to the person who commands the company? Then why should the address of that person appear, when one signalist must be able to see the other one if the message is to be sent by flag?

Why should the Battalion Commander's signature appear on that battlefield message if HIS SIGNALIST is sending the message?

Locations seldom need be inserted in the message because both signalists must be able to see one another to be able to send the message, and if the Commander is not RIGHT THERE the signalist at least knows where to find him.

Time need not be sent. The time is RIGHT NOW and the date is NOW.

Hence we SEND, by means of the FLAG, as LITTLE AS POSSIBLE, but we teach the signalists to FILL IN the message from the CALL and the SIGN that were used and deliver the message in a completed form.

Therefore, the following rules:

1. If the message is from ONE ORGANIZATION COMMANDER to another ORGANIZATION COMMANDER no address nor signature are flag-signaled, the CALL designates TO WHOM the message is to be delivered, and the SIGN designates FROM WHOM the message originated.

2. If the message is from an ORGANIZATION COMMANDER to an INDIVIDUAL the CALL of the organization in which that individual is serving is used, and the words "To the Adjutant" (or whoever it may be) PRECEDE the message, and if checking is done, these words are ALL checked. But no signature is signaled.

3. If the message is from an INDIVIDUAL to an ORGANIZATION COMMANDER no address is signaled, but the words "From The Adjutant" (or whoever it may be) PRECEDE the message, and if checking is done, ALL of these words are checked. No signature is signaled.

4. If the message is from an INDIVIDUAL to another INDIVIDUAL the sending signalist calls the organization in which the recipient is serving. Then the words "To Lieut. Jones from Lieut. Brown" PRECEDE the message, and if checking is done ALL of these words are checked. No signature is signaled.

5. Locations are omitted unless they MUST be sent, in which case they precede the message and ARE CHECKED, including the word "AT." For example:

Digitized by Google

"To Lieut. Jones at Hill 40 from Lieut. Brown at Bomont."
Then would follow the message, but no signature.

6. The writer should fill in the blank completely (except the call and the sign, date, hour, and check) and should SIGN HIS INITIALS.

7. The SENDING SIGNALIST fills in the call, sign, date and hour, and the check if there is time, otherwise omits the check.

8. The RECEIVING SIGNALIST identifies the person to whom the message is sent from the CALL; adds his address as HE KNOWS IT TO BE; fills in from whom the message originated, from the SIGN; adds such person's address by describing the location of the sending signalist. If the message comes in abbreviated words, the receiving signalist writes these words out in full AS THEY ARE ARRIVING, and tallys a check-tally for each word AS SOON AS THAT WORD IS FINISHED.

EXAMPLES OF A COMBAT MESSAGE

Example 1.

Writer writes:

(To) C. O. 2nd Bn 22nd Inf (At) Tobin
(From) C. O. 22nd Inf (At) Hill 102
Move your battalion to edge of woods reinforcing the First Battalion on its left flank.

A. B. S.

The Sending Signalist sends:

(Calls 2)
(Signs 7)
Mv ur bn to edge of woods reing 1 on its lfk Ck 12.

The Receiving Signalist records, by identifying the Call, the Sign, and the locations of himself and the Sending Signalist:

(To) Comdg Officer 2nd Bn 22nd Inf (At) Waterworks, Tobin
(From) Comdg Officer 22nd Inf (At) Hill 102
Move your battalion to edge of woods reinforcing the first battalion on its left flank.

Example 2.

Writer writes:

(To) C. O. 2nd Bn 22nd Inf (At) Tobin
(From) Lieut Jones 22nd Inf (At) Crossroads
Point halted on account of bridge out over Snake Creek.

A. C. J.

The Sending Signalist sends:

(Calls 2)
(Signs Pt)
Fm Lt Jones 22 I at xrqads pt hltd acct bridge out over Snake Creek Ck 16

The Receiving Signalist identifies the address by the Call, and had not Lieut. Jones' name appeared he would have entered after "From" "Comdr of the Point" on account of "Pt" being the sign, whereas he records

(To) C. O. 2nd Bn 22nd Inf (At) Tobin
(From) Lt Jones 22nd Inf (At) With Point at Crossroads
Point halted on account of bridge out over Snake Creek.

THE COMBAT MESSAGE BLANK

What the WRITER writes:

Plate 3 shows what the writer writes. He does not enter the Call, the Sign, the Date, nor the Check. He should enter the "To" and the "From" spaces, and may enter the "At" spaces, but if he fails to do so the Sending Signalist will do it anyhow. The writer signs his initials, as "A. S. B."

What the SENDING SIGNALIST does:

Plate 4 shows what the Sending Signalist ADDS to what the Writer has written. If the Writer should make no entries in the "To," "From," and the "At" spaces the Sending Signalist fills these spaces in. The "Call" space is for the call designation of the organization which is to

Digitized by Google

CALL SIGN	TO C.O. 2nd Bn.	AT Dobin
	FROM	AT

COMBAT MESSAGE

Move your battalion to edge of woods reinforcing the First battalion on its left flank.

A. S. B.

SENDING SIGNALIST					RECEIVING SIGNALIST
MONTH	DAY	YEAR	TIME	A. M. / P. M.	C / K

PLATE III

Digitized by Google

CALL SIGN			
2	TO		AT
7	FROM	C.O 22nd Inf.	AT Hill 102

COMBAT MESSAGE

SENDING SIGNALIST					RECEIVING SIGNALIST	
Jones C.F. Pvt. Hq Co.						
MONTH	DAY	YEAR	TIME	A. M. ~~P. M.~~	C K	12
7	25	17	8:12			

Digitized by Google

PLATE IV

CALL SIGN			
2	TO	AT	
7	FROM	AT	

COMBAT MESSAGE

Mv ur bn to edge of woods
reing 1 on its lfk Ck 12

SENDING SIGNALIST					RECEIVING SIGNALIST
MONTH	DAY	YEAR	TIME	A. M. / P. M.	C / K

PLATE V

Digitized by Google

CALLSIGN			
2	TO C.O. 2nd Bn. 22nd Inf.	AT Waterworks, Dobin
7	FROM C.O. 22nd Inf.	AT Hill 102

COMBAT MESSAGE

Move your battalion to edge of woods reinforcing the first battalion on its left flank.

SENDING SIGNALIST					RECEIVING SIGNALIST Rohm, L.C. Pvt. Co C 22 Inf.
MONTH	DAY	YEAR	TIME	A.M. ~~P.M.~~	CK ||||| ||||| || — 12
7	25	17	8:15		

Digitized by Google

receive the message, and the "sign" space is for the sign of the writer's signalist or the sending organization. The Sending Signalist signs his name and rank, dates and times the message (time is the TIME HE BEGINS TO SEND IT).

Plate 5 shows exactly **what is signaled** by means of the flag for a message of the type shown. If either the writer or the receiver is NOT an organization commander the words which indicate who he is must be signaled. Locations can be omitted only when the signalist is accompanying the writer (or the recipient).

What the RECEIVING SIGNALIST delivers:

Plate 6 shows **the Receiving Signalist's interpretation** of the message. The "To" is given by the CALL; the "From" is given by the SIGN; the "AT's" are the locations of the SIGNALISTS.

The Receiving Signalist signs his name and rank, enters the date and time (time is the time the message was COMPLETED), and tallys the check as the words come.

The Receiving Signalist, receiving an abbreviated word, writes the word out IN FULL on the blank AT THE TIME HE READS IT.

If, after the Sending Station has been acknowledged by the Receiving Signalist, the message starts out "To . . . etc." the Receiving Signalist knows that the person who is to receive the message IS NOT the organization commander of the organization called by means of the call symbol used by the Sending Signalist, and records what is sent in the "To" space. The same applies to the "From" and the "At" spaces.

If no check is signaled the Receiving Signalist will not ask for it, but will enter the check as HE makes it, anyhow, on the received blank.

THE COMBAT-CODE MESSAGE

The Combat Code Message is merely a type of message designed by the author, to handle with efficiency and dispatch, and IN THE FORM OF A MESSAGE the authorized and prescribed DRILL REGULATION LETTERS FOR COMBAT MANDATES of the different arms of the service.

To obtain efficiency, it is essential that these letters be handled AS MESSAGES, so they can be directed to the organization for whom they are intended AND TO NO ONE ELSE. If we see a flag on a hill behind us frantically signaling "Move forward" how are we to know WHO is to move forward—it may not be for us at all.

The following principles have therefore been assigned by the author to govern the handling of these messages:

1. The organization for whom that mandate is intended is to be CALLED by the sending signalist.

2. To prevent the receiving signalist from expecting the calling signalist to sign, the calling signalist, AS SOON AS HE HAS CALLED signals "U," pauses an instant, then send the letter mandate several times. "U" means "COMBAT CODE IS COMING."

3. The receiving signalist acknowledges WHEN THE LETTER MANDATE BEGINS TO REPEAT, and does so very promptly.

4. When the sending signalist sees that all the acknowledgements ARE IN he signs.

5. If the sending signalist begins to repeat and does not PROMPTLY get his acknowledgements he stops and begins calling again.

6. The sending signalist may call AS MANY TIMES AS HE THINKS NECESSARY before he sends "U."

7. If the message is FOR ALL THE TROOPS under the command of the sending signalist's commander he may use "4" as a call PROVIDED HE SIGNS BEFORE HE SENDS "U" (otherwise the signal might affect the entire command when it was intended for only the battalion).

8. If the sending signalist desires to send plain words right after the mandate he uses "X" after the mandate to indicate that words are to follow. In such case HE MUST NOT REPEAT the MANDATE LETTERS before he sends "X."

Digitized by Google

9. The RECEIVING SIGNALIST ACKNOWLEDGES with "R" and the call of HIS ORGANIZATION, but does not add his PERSONAL SIGNATURE.

10. Combat Code Messages are ALWAYS UNCHECKED MESSAGES.

11. If the sending signalist so desires he may call on all receiving signalists to ACKNOWLEDGE AGAIN after he has completed the message, by sending "ak," meaning "please acknowledge." In this case all receiving signalists acknowledge again, and those within sight of one another do so IN TURN, alphabetically.

12. The RECEIVING SIGNALIST must always read the SIGN of the sending signalist, but does not delay the delivery of the message to his commander while he is doing so.

13. The SENDING SIGNALIST MAY AND SHOULD sign several times, not merely ONCE. That is why the sign is put last.

14. If the Receiving Signalist has caught the mandate but did NOT catch the CALL, he may inquire of the sending signalist "Is that message intended for me?" by calling the sending signalist and signaling "for me" by signing the sign of his organization.

15. The Receiving Signalist TRANSLATES the message into plain words and delivers the message VERBALLY to his commander.

Examples of Combat Code Messages:—

1. Commanding Officer of the 2nd Battalion desires to notify Company "G" to HALT AND COMMENCE FIRING.

Message:— (Signal "attention," then)

23 * 23 * 23 * 23 * U * H * F * H * F * H * F (etc.) * 2 * 2 * 2 * 2 *

2. Commanding Officer of the 2nd Battalion desires to notify Companies "G" and "H" to FIX BAYONETS AND RUSH but not to interfere with the other companies present.

Message:— (Signal "attention," then)

23 * 24 * 23 * 24 * U * FB * DT * FB * DT * (etc.) * 2 * 2 * 2 * 2 * 2 *

3. Commanding Officer of the 22nd Inf (no other regiments present) desires to notify his entire regiment to CEASE FIRING.

Message:— (Signal "attention," then)

4 * 4 * 4 * 4 * 7 * U * CF * CF * CF * CF * (etc.) * 7 * 7 * 7 * 7 * 7 *

4. Same as case 3, but there are other regiments present.

Message:— (Signal "attention," then)

4 * 4 * 4 * 4 * 7 2 * U * CF * CF * CF * CF * (etc.) * 722 * 722 * 722 *

Hint to Organization Commanders:—

Give your combat mandates in this form:

"Notify (such commander) to do (such a thing)"

as, for example,

"Notify Company "G" to halt and commence firing";

and NOT in this manner, for example,

"Call up Captain Jones over there on that hill and tell him to halt his company and commence firing"

How Abbreviated Words and the Regular Combat Message may be used:—

By using abbreviated words and following the form of the COMBAT MESSAGE a combat mandate may be signaled ALMOST as quickly as it can be by using the drill regulation letter mandates, and the sending signalist is not restricted to iron-clad expressions. For example;—

Message is:— "Halt and commence firing"

By letter mandates, not following Combat Code form,

"H H H F"

By letter mandates, following Combat Code form,

"H * F * H * F *" (etc.)

By Combat Message form,

"Hlt * fir *"

Digitized by Google

ESMOND M. O'BRIEN, BROOKLYN 2, N. Y.

HOW THE RECEIVING SIGNALIST MAY KNOW WHAT TYPE OF MESSAGE TO EXPECT

Standard Field Message:—
This message begins with Nr and takes the form shown on the top line of Plate 2, page 49.

Combat Message:—
This message begins directly with the message proper, which will NEVER start with "Nr."
or
The message may begin with an address, in which the first word is either "TO" or "AT"; or it may begin with the identification of the WRITER, in which case the first word is "FROM."

Combat-code Message:—
The letter "U" shows that this type of message is to follow.

LIST OF ABBREVIATED WORDS

This list is to the Expert Flag Signalist what the Phillips Code is to the Associated Press expert telegraph operator, and should be memorized by flag operators.

The list is composed of **BASE** words and **DERIVED** words, and the learner need only commit to memory the base words, learn the simple rules for obtaining the derived words, and he has the entire list at his finger tips before he realizes it.

All words are not coded. It was the aim of the author to code and abbreviate only those **LONG** military words that take so much time to send by means of the flag, and **short** ones which occur frequently. In doing this the Phillips Code has been consulted but not always followed.

The base words are abbreviated as much as possible (usually by omitting vowels); the derived words obtained by the following iron-clad rules (totally without exception):

Plurals:—Usually omit, but where sense is ambiguous add "s" to singular.
Ending "ed":—Abbreviated to "d"
Ending "ing":—Abbreviated to "g"
Ending "ment":—Abbreviated to "mt"
Ending "tion":—Abbreviated to "tn"
Any derived word, though not listed, which ends in "ed," "ing," "ment," or "tion" may be abbreviated as regards these endings. For example, "TURN" is not listed, hence it is not abbreviated, but "turning" is a derived word, and may be abbreviated to "turng."

EXAMPLE OF MESSAGE, ABBREVIATED AND NOT ABBREVIATED

Abbreviated	Not Abbreviated
113 Letters Cav pls sctg vcnty Forks Riv rpt nmi concntg ne tt pt aprntly wi intntn of turng our lfk Adv ur sq and mgtr to vcnty Mayburn to prevent ts mvmt	215 Letters Cavalry patrols scouting in the vicinity of Forks River report enemy concentrating northeast of that point apparently with the intention of turning our left flank Advance your squadron and machine gun troop to vicinity of Mayburn to prevent this movement

Military messages may thus be cut about in half, therefore flag signalists should memorize and use this list.

Digitized by Google

A

ABOUT ..... abt
ACCOMPANY ..... aco
accompanied ..... acod
accompanying ..... acog
ACKNOWLEDGE(s) ..... ack(s)
acknowledged ..... ackd
acknowledging ..... ackg
acknowledgement(s) .... ackmt(s)
ADDITIONAL ..... ad
ADDRESS(es) ..... adrs(s)
addressed ..... adrsd
addressing ..... adrsg
ADVANCE(s) ..... adv(s)
advanced ..... advd
advancing ..... advg
AFTER ..... af
AFTERNOON(s) ..... afn(s)
AGAIN ..... agn
against ..... agnst
AMBULANCE(s) ..... amb(s)
ambulance company(ies)..ambco(s)
AMMUNITION ..... amm
ammunition train(s) ... ammtn(s)
AMOUNT(s) ..... amt(s)
ANNOUNCE(s) ..... annc(s)
announced ..... annod
announcing ..... anncg
announcement(s) ..... anncmt(s)
ANOTHER ..... anr
ANSWER(s) ..... ans(s)
answered ..... ansd
answering ..... ansg
APPARENT ..... aprnt
apparently ..... aprntly
APPEAR(s) ..... apr(s)
appeared ..... aprd
appearing ..... aprg
appearance(s) ..... aprnc(s)
APPROXIMATE ..... aprox
approximated ..... aproxd
approximating ..... aproxg
approximately ..... aproxly
ARRANGE(s) ..... arng(s)
arranged ..... arngd
arranging ..... arngg
arrangement(s) ..... arngmt(s)
ARRIVE(s) ..... arv(s)
arrived ..... arvd
arriving ..... arvg
arrival(s) ..... arvl(s)
ARTILLERY ..... art
ASSIST(s) ..... asst(s)
assisted ..... asstd
assisting ..... asstg
assistant(s) ..... asstnt(s)
ATTACK(s) ..... atk(s)
attacked ..... atkd
attacking ..... atkg
AUTOMOBILE(s) ..... auto(s)
AUTOTRUCK(s) ..... autk(s)
AVIATOR(s) ..... avir(s)
aviation ..... avin
AWAY ..... awa

B

BAGGAGE ..... bag
BALANCE(s) ..... bal(s)
BATTALION(s) ..... bn(s)
BATTERY(ies) ..... btry(s)
Battery Commander ..... bc
BE ..... b
BEFORE ..... bf
BETTER ..... btr
BETWEEN ..... btn
BREAK (BROKE) (s) .... bk(s)
breaking ..... bkg
broken ..... bkn
BRIGADE(s) ..... brig(s)
Brigadier-general ..... bg

C

CAISSON(s) ..... cn(s)
CAPTAIN(s) ..... cap(s)
CAPTURE(s) ..... captr(s)
captured ..... captrd
capturing ..... captrg
CAVALRY ..... cav
CENTER c
CHECK(s) ..... ck(s)
checked ..... ckd
checking ..... ckg
COLONEL(s) ..... col(s)
COLUMN(s) ..... colm(s)
COMBAT ..... comb
combat train(s) ..... ctn(s)
COMMAND(s) ..... comd(s)
commanded ..... comdd
commanding ..... comdg
commander(s) ..... comdr(s)
Commanding Officer at ..... kot
Commanding Officer of ..... kof
Commanding Officer ..... ko
Commanding General ..... kg
COMMENCE(s) ..... cmnc(s)
commenced ..... cmncd
commencing ..... cmncg
commencement ..... cmncmt
COMMUNICATE(s) ..... comu(s)
communicated ..... comud
communicating ..... comug
communication(s) ..... comutn(s)
COMPANY(ies) ..... co(s)
COMPLETE(s) ..... complt(s)
completed ..... complid
completing ..... complig
completion ..... complin
CONCEAL(s) ..... concl(s)

Digitized by Google

concealed ..... concld
concealing ..... conclg
concealment(s) ..... conclmt(s)
CONCENTRATE(s) .... concnt(s)
concentrated ..... concntd
concentrating ..... concntg
concentration(s) ..... contntn(s)
CONDITION(s) ..... cond(s)
conditioned ..... condd
conditioning ..... condg
conditionally ..... condly
CONFER(s) ..... confr(s)
conferred ..... confrd
conferring ..... confrg
conference(s) ..... confrnc(s)
CORPORAL(s) ..... corp(s)
CORRECT(s) ..... corct(s)
corrected ..... corctd
correcting ..... corctg
correction(s) ..... corctn(s)
CORRECTOR ..... kr
COVER(s) ..... covr(s)
covered ..... covrd
covering ..... covrg

D

DANGEROUS ..... dngrus
DAY(s) ..... da(s)
DEFINITE ..... dfnt
definitely ..... dfntly
DEFLECTION ..... df
DELIVER(s) ..... dlr(s)
delivered ..... dlrd
delivering ..... dlrg
delivery(ies) ..... dlry(s)
DEMOLISH(es) ..... dmol(s)
demolished ..... dmold
demolishing ..... dmolg
demolition(s) ..... dmoltn(s)
DEPART(s) ..... dpt(s)
departed ..... dptd
departing ..... dptg
departure(s) ..... dptr(s)
department(s) ..... dptmt(s)
DEPLOY(s) ..... dply(s)
deployed ..... dplyd
deploying ..... dplyg
deployment(s) ..... dplymt(s)
DESIGNATE(s) ..... dsgnat(s)
designated ..... dsgnatd
designating ..... dsgnatg
designation(s) ..... dsgnatn(s)
DESTINATION(s) ..... dstn(s)
DETACH(es) ..... det(s)
detached ..... detd
detaching ..... detg
detachment(s) ..... detmt(s)
DISMOUNT(s) ..... dismt(s)
dismounted ..... dismtd
dismounting ..... dismtg
DISPOSITION(s) ..... dispo(s)
DIVERGE(s) ..... dvrg(s)
diverged ..... dvrgd
diverging ..... dvrgg
DIVISION(s) ..... dlv(s)

E

EAST ..... e
eastern ..... en
EMBANKMENT(s) .... mbkmt(s)
EMBARK(s) ..... mbrk(s)
embarked ..... mbrkd
embarking ..... mbrkd
embarkation(s) ..... mbrktn(s)
ENCAMP(s) ..... ncp(s)
encamped ..... ncpd
encamping ..... ncpg
encampment(s) ..... ncpmt(s)
ENCOUNTER(s) ..... nctr(s)
encountered ..... nctrd
encountering ..... nctrg
ENDEAVOR(s) ..... ndvr(s)
endeavored ..... ndvrd
endeavoring ..... ndvrg
ENEMY(s or ies) ..... nmi(s)
ENGAGE(s) ..... ngag(s)
engaged ..... ngagd
engaging ..... ngagg
engagement(s) ..... ngagmt(s)
ENGINEER(s) ..... eng(s)
engineering ..... engg
ENTRAIN(s) ..... ntn(s)
entrained ..... ntnd
entraining ..... ntng
ENTRENCH(s) ..... ntch(s)
entrenched ..... ntchd
entrenching ..... ntchg
entrenchment(s) ..... ntchmt(s)
ESCHELON(s) ..... esch(s)
escheloned ..... eschd
escheloning ..... eschg
ESCORT(s) ..... scrt(s)
escorted ..... scrtd
escorting ..... scrtg
ESCAPE(s) ..... scap(s)
escaped ..... scapd
escaping ..... scapg
escapement ..... scapmt
EVENING(s) ..... eve(s)
EXAMINE(s) ..... xmn(s)
examined ..... xmnd
examining ..... xmng
examination(s) ..... xmntn(s)
EXPEDITION(s) ..... xpdn(s)
expeditionary ..... xpdnry
EXPOSE(s) ..... xpos(s)
exposed ..... xposd
exposing ..... xposg
EXTEND(s) ..... xtnd(s)
extended ..... xtndd
extending ..... xtndg
extension(s) ..... xtnsn(s)
extended order ..... xtnor

Digitized by Google

F

FIELD(s) ..... fld(s)
field hospital(s) ..... fh(s)
field train(s) ..... ftn(s)
field artillery ..... fa
FIELD ORDER(s) ..... fo(s)
FIRE(s) ..... fir(s)
fired ..... frd
firing ..... firg
firing line(s) ..... firln(s)
FLANKS(s) ..... fk(s)
FOLLOW(s) ..... folo(s)
followed ..... folod
following ..... folog
FORWARD(s) ..... frd(s)
forwarded ..... frdd
forwarding ..... frdg
FRIDAY(s) ..... fri(s)
FROM ..... fm

G

GAS ATTACK ..... gsatk
GENERAL ORDER(s)..... go(s)
GIVE BETTER ADDRESS .. gba
GIVE SOME ADDRESS ..... gsa
GUARD(s) ..... grd(s)
guarded ..... grdd
guarding ..... grdg

H

HALT(s) ..... hlt(s)
halted ..... hltd
halting ..... hltg
HAVE ..... hv
HEADQUARTERS ..... hq
HERE or HEAR(s) ..... hr(s)
heard ..... hrd
hearing ..... hrg
HOSPITAL(s) ..... hosp(s)
HOSTILE ..... hstl
hostilities ..... hstlts
HOUR(s) ..... ho(s)
HUNDRED(s) ..... hnd(s)
HUNDREDS of YARDS .... hyds

I

IMMEDIATE ..... imm
immediately ..... immly
IMPASSIBLE ..... impasbl
IMPORTANT ..... import
importance ..... importnc
IMPOSSIBLE ..... impos
impossibility ..... imposty
IMPRACTICABLE ..... imprac
impracticability ..... impracty
IMPROBABLE ..... improb
improbability ..... improbty
INDEFINITE ..... indef
indefinitely ..... indefly
INDICATE(s) ..... ind(s)
indicated ..... indd
indicating ..... indg
indication(s) ..... indtn(s)
INDIVIDUAL(s) ..... indiv(s)
INFANTRY('s) ..... inf(s)
INFORM(s) ..... infm(s)
informed ..... infmd
informing ..... imfmg
information ..... infmtn
INSECURE ..... insec
INSTRUCT(s) ..... inst(s)
instructed ..... instd
instructing ..... instg
instruction(s) ..... instn(s)
INTERMEDIATE ..... inter
INTEND(s) ..... intnd(s)
intended ..... intndd
intending ..... intndg
intention(s) ..... intntn(s)
INVISIBLE ..... invis
invisibility ..... invisty

J

JOURNEY(s or ies) ..... jrny(s)
JUSTIFY(ies) ..... jsfy(s)
JUDGE(s) ..... jdg(s)
judge(s) ..... jdg(s)
judged ..... jdgd
judging ..... jdgg
judgement(s) ..... jdgmt(s)

K

k—see "cal" and "co"
KILLED ..... kld
killing ..... klg

L

LAND(s) ..... lnd(s)
landed ..... lndd
landing ..... lndg
landing party(ies) ..... lndpty(s)
LEFT ..... lt
left flank(s) ..... lfk(s)
LIEUTENANT(s) ..... lt(s)
lieutenant-colonel(s) ..... ltcol(s)
lieutenant-general(s) .... ltgen(s)
LIMBER(s) ..... limbr(s)
limbered ..... limbrd
limbering ..... limbrg
LINE(s) ..... ln(s)
LOCOMOTIVE(s) ..... loco(s)

Digitized by Google

M

m—see "em"
MACHINE GUN(s) ..... mg(s)
machine gun company(ies) . mgco(s)
machine gun troop(s) ..... mgtr(s)
machine gun platoon(s) ... mgpn(s)
machine gun section(s) .... mgse(s)
machine gun detachment(s) .....
..... mgdet(s)
MAIL(s) ..... mal(s)
mailed ..... mald
mailing ..... malg
MAJOR(s) ..... maj(s)
majority ..... majty
major-general(s) ..... majen(s)
MAKE(s) ..... mk(s)
making ..... mkg
maker(s) ..... mkr(s)
MANY ..... mny
MARCH(es) ..... mch(s)
marched ..... mchd
marching ..... mchg
MAXIMUM ..... max
MESSAGE(s) ..... msg(s)
messenger(s) ..... msgr(s)
MILITARY POLICE ..... mp
MINUTE(s) ..... min(s)
MOBILE ..... mobi
mobility ..... moblty
mobilize(s) ..... mobliz(s)
mobilized ..... moblizd
mobilizing ..... moblizg
mobilization(s) ..... mobliztn(s)
MORNING(s) ..... mng(s)
MOUNT(s) ..... mnt(s)
mounted ..... mntd
mounting ..... mntg
mountain(s) ..... mtn(s)
MOVE(s) ..... mv
moved ..... mvd
moving ..... mvg
movement(s) ..... mvmt(s)
MUSICIAN(s) ..... mus(s)

N

n—see "en"
NECESSARY ..... nec
NECESSITY(ies) ..... necsty(s)
NEIGHBORING ..... nabrg
NEIGHBORHOOD(s) .. nabrhd(s)
NIGHT(s) ..... nl(s)
NON-COM. OFFICER(s) ... nco(s)
NORTH ..... n
northern ..... nthn
northernly ..... nthnly
northeast ..... ne
northwest ..... nw
NUMBER(s) ..... nr(s)
numbered ..... nrd
numbering ..... nrg

O

OBSERVE(s) ..... obs(s)
observed ..... obsd
observing ..... obsg
observation(s) ..... obstn(s)
observation station(s) .... obstat(s)
observation point(s) ..... obspt(s)
OCCUPY(ies) ..... ocupi(s)
occupied ..... ocupid
occupying ..... ocupig
occupation(s) ..... ocuptn(s)
O'CLOCK ..... ock
OFFICIAL BUSINESS ..... ob
OPERATE(s) ..... oprat(s)
operated ..... opratd
operating ..... opratg
operation(s) ..... opratn(s)
operator(s) ..... opr(s)
OPPORTUNITY(ies) .... oprty(s)
OPPOSE(s) ..... opos(s)
opposed ..... posd
opposing ..... posg
opposite ..... posit
opposition(s) ..... positn(s)
ORGANIZE(s) ..... orgn(s)
organized ..... orgnd
organizing ..... orgng
organization(s) ..... orgntn(s)
OUTNUMBER(s) ..... outnr(s)
outnumbered ..... outnrd
outnumbering ..... outnrg

P

PARALLEL(s) ..... paral(s)
PASSIBLE ..... pasbl
PATROL(s) ..... pl(s)
patrolled ..... pld
patrolling ..... plg
PERMANENT ..... permnt
permanently ..... permntly
PERMIT(s) ..... permit(s)
permitted ..... permitd
permitting ..... permitg
permission ..... permisn
PERTAIN(s) ..... pertan(s)
pertained ..... pertand
pertaining ..... pertang
PIONEER(s) ..... pio(s)
pioneer battalion(s) ..... piobn(s)
pioneer company(ies) .... pioco(s)
pioneer detach(s) ..... piodet(s)
PLATOON(s) ..... pn(s)
POINT(s) ..... pt(s)
pointed ..... ptd
pointing ..... ptg

Digitized by Google

PONTON(s) ..... pon(s)
ponton train(s) ..... pontn(s)
ponton battalion(s) ..... ponbn(s)
ponton company(ies) .... ponco(s)
ponton detach.(s) ..... pondet(s)
POSITION(s) ..... psn(s)
possibility(ies) ..... posty(s)
POSSIBLE ..... pos
POST(s) ..... pst(s)
posted ..... pstd
posting ..... pstg
POST OFFICE ..... po
PRACTICABLE ..... prac
practicability ..... practy
PREPARE(s) ..... prep(s)
prepared ..... prepd
preparing ..... prepg
preparation(s) ..... prepn(s)
PRIVATE(s) ..... pvt(s)
probability(ies) ..... probty(s)
PROBABLE ..... prob
PROTECT(s) ..... prot(s)
protected ..... protd
protecting ..... protg
protection ..... protn

Q

QUALIFY ..... qalfi
qualifies ..... qalfis
qualified ..... qalfid
qualifying ..... qalfig
qualification(s) ..... qalfin(s)
QUARTER(s) ..... q(s)
quartered ..... qd
quartering ..... qg
quartermaster ..... qm
quartermaster corps ..... qmc
QUESTION(s) ..... qstn(s)
questioned ..... qstnd
questioning ..... qstng

R

RADIO ..... rad
RAILROAD(s) ..... rr(s)
RAILWAY(s) ..... ry(s)
RANGE(s) ..... rn(s)
ranged ..... rnd
ranging ..... rng
RATION(s) ..... rat(s)
rationed ..... ratd
rationing ..... ratg
RECEIVE(s) ..... rec(s)
received ..... recd
receiving ..... recg
receipt(s) ..... recpt(s)
receipted ..... recptd
receipting ..... recptg
RECEIVED (msg) ..... r
reception(s) ..... recptn(s)
RECONNOITER(s) ..... rek(s)
reconnoitered ..... rekd
reconnoitering ..... rekg
reconnaissance(s) ..... rekon(s)
RECRUIT(s) ..... rct(s)
recruited ..... rctd
recruiting ..... rctg
REFER(s) ..... ref(s)
referred ..... refd
referring ..... refg
reference(s) ..... refnc(s)
REGARD(s) ..... regrd(s)
regarded ..... regrdd
regarding ..... regrdg
REGIMENTAL ORDER ..... ro
REGIMENTAL STATION ..... rs
REGIMENT(s) ..... reg(s)
regimental ..... regl
REGULATE(s) ..... regu(s)
regulated ..... regud
regulating ..... regug
regulation(s) ..... regutn(s)
REINFORCE(s) ..... rein(s)
reinforced ..... reind
reinforcing ..... reing
reinforcement(s) ..... reinmt(s)
REJOIN(s) ..... rej(s)
rejoined ..... rejd
rejoining ..... rejg
RELIEVE(s) ..... rel(s)
relieved ..... reld
relieving ..... relg
relief(s) ..... relf(s)
REMAIN(s) ..... reman(s)
remained ..... remand
remaining ..... remang
remainder(s) ..... remandr(s)
REPEAT(s) ..... repet(s)
repeated ..... repetd
repeating ..... repetg
repetition(s) ..... repetn(s)
REPLENISH(es) ..... replnsh(s)
replenished ..... replnshd
replenishing ..... replnshg
REPORT(s) ..... rpt(s)
reported ..... rptd
reporting ..... rptg
REQUISITION(s) ..... req(s)
requisitioned ..... reqd
requisitioning ..... reqg
RESERVE(s) ..... rv(s)
reserved ..... rvd
reserving ..... rvg
reservation(s) ..... rvatn(s)
RESPONSIBLE ..... respbl
responsibility(ies) .... respblty(s)
RESUME(s) ..... resum(s)
resumed ..... resumd
resuming ..... resumg
resumption ..... resumtn
RETIRE(s) ..... retir(s)

Digitized by Google

retired ..... retird
retiring ..... retirg
RETREAT(s) ..... retrt(s)
retreated ..... retrtd
retreating ..... retrtg
RETURN(s) ..... return(s)
returned ..... returnd
returning ..... returng
REVET(s) ..... revt(s)
revetted ..... revtd
revetting ..... revtg
revetment(s) ..... revtmt(s)
RIGHT ..... rt
right flank(s) ..... rfk(s)
RIVER(s) ..... riv(s)

S

SANITARY ..... sn
sanitary train(s) ..... sntn(s)
sanitary troops ..... sntrs
sanitation ..... sntatn
SCOUT(s) ..... sct(s)
scouted ..... sctd
scouting ..... sctg
SECTION(s) ..... sc(s)
SECURE(s) ..... secur(s)
secured ..... securd
securing ..... securg
securely ..... securly
security(ies) ..... securty(s)
SERGEANT(s) ..... sgt(s)
SHELL(s) ..... sh(s)
shelled ..... shd
shelling ..... shg
SICK ..... sk
SICKNESS ..... skns
SIGN(s) ..... sin(s)
signed ..... sind
signing ..... sing
signature(s) ..... sig(s)
signal(s) ..... sigl(s)
signaled ..... sigld
signaling ..... siglg
signal operator(s) ..... sigop(s)
signal corps ..... sc
signal troops ..... sigtrs
signal detach.(s) ..... sigdet(s)
SIGNAL OFFICER ..... so
SOUTH ..... s
southern ..... sthn
southernly ..... sthnly
southeast ..... sest
southwest ..... sw
SPECIAL ORDER ..... so
SQUAD(s) ..... sd(s)
SQUADRON(s) ..... sq(s)
SUBDIVIDE(s) ..... subdi(s)
subdivided ..... subdd
subdividing ..... subdg
subdivision(s) ..... subdn(s)
SUPPLY(s or ies) ..... sp(s)
supplied ..... spd
supplying ..... spg
supply train(s) ..... sptn(s)
SUPPORT(s) ..... su(s)
supported ..... sud
supporting ..... sug
SURGEON(s) ..... sur(s)

T

TELEGRAM(s) ..... tgm(s)
TELEGRAPH(s) ..... tgh(s)
telegraphed ..... tghd
telegraphing ..... tghg
telegraphy ..... tghy
TELEPHONE(s) ..... fone(s)
telephoned ..... foned
telephoning ..... foneg
telephony ..... fony
TERRAIN ..... teran
THAT ..... tt
THE ..... t
THESE ..... tse
THIS ..... ts
THOROUGH ..... thoro
THOUGH ..... tho
THROUGH ..... thru
TOMORROW ..... tomo
tomorrow-morning ..... tomomg
tomorrow-afternoon ..... tomoaf
tomorrow-evening ..... tomoev
tomorrow-night ..... tomoni
TRAIN(s) ..... tn(s)
trained ..... tnd
training ..... tng
TRANSPORT(s) ..... tnspt(s)
transported ..... tnsptd
transporting ..... tnsptg
transportation ..... tnsptn
TROOP(s) ..... tr(s)

U

UNCONDITIONAL ..... uncondl
unconditionally ..... uncondly
UNEXPECTED ..... unxpd
unexpectedly ..... unxpdly
UNFINISHED ..... unfind
UNIFORM(s) ..... uni(s)
UNLIMBER(s) ..... unlmbr(s)
unlimbered ..... unlmbrd
unlimbering ..... unlmbrg
USEFUL ..... usfl
usefulness ..... usfins
UTILIZE(s) ..... utliz(s)
utilized ..... utlizd
utilizing ..... utlizg
utility(ies) ..... utlti(s)
utilization ..... utlizn

Digitized by Google

V

VEHICLE(s) ..... vhicl(s)
VICINITY(ies) ..... vcnty(s)
VIGILANT ..... vigint
vigilance ..... viginc
VISIBLE ..... vis
visibility ..... visty
VOLLEY(ies) ..... voll(s)
VOLUME(s) ..... volum(s)
VOLUNTEER(s) ..... vo(s)

W

WATERWORKS ..... ww
WATERTANK(s) ..... wtnk(s)
WEIGHT(s) ..... wt(s)
WEST ..... w
western ..... wn
westernly ..... wnly
WITH ..... wi
WITHOUT ..... wiout
WITHDRAW(s) ..... widra(s)
withdrew ..... widru
withdrawing ..... widrag
withdrawal ..... widral
WOUND(s) ..... wund(s)
wounded ..... wundd
wounding ..... wundg

X

X see "ex"

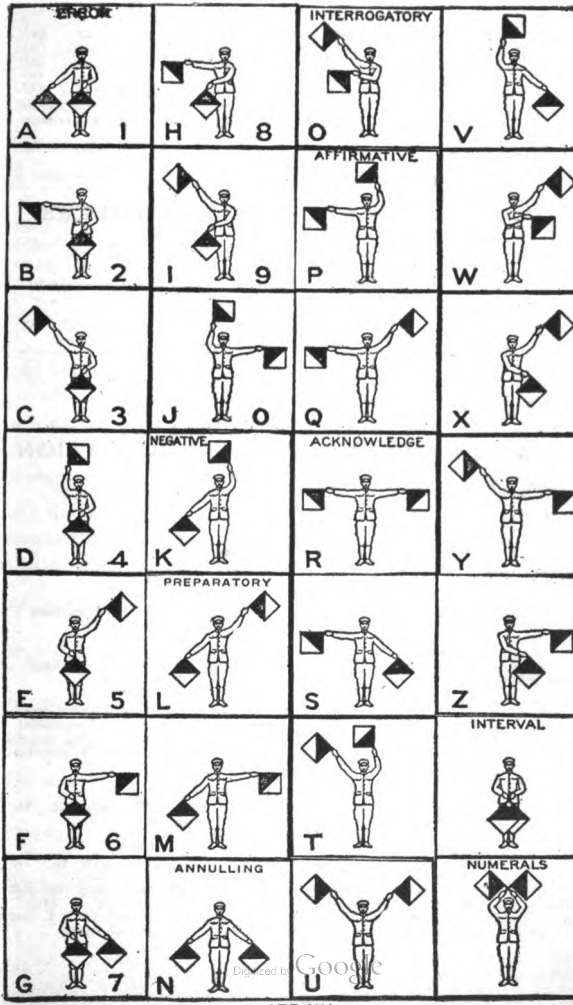
Y

YARD(s) ..... yd(s)
YELLOW ..... ylo
YES ..... y
YESTERDAY ..... ystrdy
yesterday-morning ..... ystrdymg
yesterday-afternon ..... ystrdyaf
yesterday-evening ..... ystrdyev
YIELD(s) ..... yeld(s)
yielded ..... yeldd
yielding ..... yeldg
you ..... u
your(s) ..... ur(s)

WIGWAG AND SEMAPHORE "FRONTS," "INTERVALS," "CHOP-CHOPS."

	Wigwag			Semaphore	Symbol
End of a word	front			interval	*
To separate call factors	front			interval	*
End of preamble	front	front		1 chop-chop	* * *
End of address	front	front		1 chop-chop	* * *
Just before "Sig"	front	front		1 chop-chop	* * *
To separate the Call from the Sign	front	front		1 chop-chop	* * *
End of entire message	front	front	front	2 chop-chops	* * *
Finished calling	front	front	front	2 chop-chops	* * *
Finished signing	front	front	front	2 chop-chops	* * *
Finished acknowledging	front	front	front	2 chop-chops	* * *
Finished what I was just saying	front	front	front	2 chop-chops	* * *

Digitized by Google



Digitized by Google

PLATE VII

Attention (wigwag and semaphore) ..... (a)
Numerals follow (semaphore only) ..... (n)
Letters follow (semaphore only) signal "attention" ..... (a)
Pause at vertical (wigwag only) ..... (v)
Remove flags from sight of distant station (wigwag and semaphore).. (r)

Note:—In order to avoid repeating "front," "interval," "numerals follow," "signal attention," etc., all through the text, the SYMBOLS * * for these have been given above. That is, wherever * * is seen, make three fronts (wigwag) or two chop-chops (semaphore).

THE WIGWAG LETTERS AND NUMBERS

A	. –	H	. . . .	O	– – –	V	. . . –
B	– . . .	I	. .	P	. – – .	W	. – –
C	– . – .	J	. – – –	Q	– – . –	X	– . . –
D	– . .	K	– . –	R	. – .	Y	– . – –
E	.	L	. – . .	S	. . .	Z	– – . .
F	. . – .	M	– –	T	–		
G	– – .	N	– .	U	. . –		

1	. – – – –	4	. . . . –	7	– – . . .	0	– – – – –
2	. . – – –	5	. . . . .	8	– – – . .		
3	. . . – –	6	–	9	– – – – .		

Note:—A Dash is a movement to the sender's LEFT.
A Dot is a movement to the sender's RIGHT.

WIGWAG AND SEMAPHORE PUNCTUATION MARKS

	Wigwag		Semaphore	
Period (.)	. . (v) . . (v) . .	*	dot	*
Comma (,)	. – . – . –	*	ka	*
Semi-colon (;)	– . – . – .	*	si	*
Colon (:)	– – – . . .	*	kn	*
Question-mark (?)	. . – – . .	*	qs	*
Dash (—)	– . . . . –	*	dx	*
Decimal-point (.)	. . (v) . . (v) . .	*	dot	
Fractional-bar (/)	. – .		L (without making "letters")	
Dollar-sign ($)	. . . (v) –. . –	*	sx	*
Parenthesis, begin or end.	– – . (v) – .	*	pn	*
Between a whole number and its fraction	.		N (without making "letters")	

Notes on above punctuation marks:

PERIOD:—Indicates "end of sentence, message, etc.," begin next word with a capital letter. May be placed at end of message but not essential.

QUESTION-MARK:—May be used to indicate "What did you say?" "I don't understand," etc., in signaling. When it appears in a message begin next word with a capital letter.

FRACTIONAL-BAR:—It is checked as "one word."

Wigwag:—do not make a "front" before nor after it.

Semaphore:—Do not make an "interval" before nor after it. Do not make the "letters" sign before it but send it as a numeral.

USE OF N:—It is NOT CHECKED.

Wigwag:—Do not make a "front" before nor after it.

Semaphore:—Do not make an "interval" before nor after it. Do not make the "letters" sign before it, but send it as a numeral.

SYMBOLS:—Where a "front" is indicated **make one**, and do not make one unless one is so indicated (a period is followed by a "front" but a decimal-point is NOT). A period (or decimal-point) is 1 1 1, but a comma is NOT a a a. For meaning of symbols see top of page.

Digitized by Google

WIGWAG AND SEMAPHORE ABBREVIATIONS

FOR WIGWAG OR FOR SEMAPHORE

Signature (to message) follows ..... sig

Please acknowledge ..... ak

I understand you. Or, I acknowledge receipt of what you just sent to me ..... r

Here is a message for you ..... hr

Here is another message for you ..... ahr

Hour ..... ho

Check ..... ck

Number (see note, bottom page 61) ..... nr

No more ..... nm

Not (intended for) you ..... nu

Go ahead (with your signaling) ..... ga

Goodbye ..... gb

Message ..... msg

Official message ..... ofm

Official message requiring an answer ..... ofmx

All right ..... ok

Wait a moment (or a little while) ..... min

By whose order? ..... bho

Pass this on to all troops near you ..... pson

Use your **WHITE** flag ..... whit

Use your **RED** flag ..... red

Use your **YELLOW** flag ..... ylo

Digitized by Google

5787248

Use your **WIGWAG** flag ..... wig

Use your **SEMAPHORE** flag ..... sem

Use your **LARGER** flag ..... larg

Use your **SMALLER** flag ..... smal

Move to your **RIGHT** ..... MR

Move to your **LEFT** ..... ML

Move **UP HILL** ..... MU

Move **DOWN HILL** ..... MD

Move to your **RIGHT** and **UP HILL** ..... MRMU

Move to your **RIGHT** and **DOWN HILL** ..... MRMD

Move to your **LEFT** and **UP HILL** ..... MLMU

Move to your **LEFT** and **DOWN HILL** ..... MLMD

Your position is **GOOD** ..... ok

Your position is **BAD** ..... bad

Send **SLOWER** ..... slo

Send **FASTER** ..... fst

Combat-code letters follow (For Inf. and Cav. only) ..... U

Message words follow (after combat-code letters have been signaled and are to be discontinued) X

The following words are not part of this message .... xx * (words) * xx

Digitized by Google

The following words are **CODE WORDS** ..... xxx * (words) * xxx *

Figures follow (when using cipher square) ..... zz * (figures) * zz *

Beware of gas ..... gas *

WIGWAG ONLY

Error in **SENDING** (for sender only to use)	*..* (then begin word over)
Error in **RECEIVING** (for receiver only to use)	Raise flag to the vertical position and hold it there till sender stops. (See "How to Break")
To break or stop the sender	Raise flag to vertical
To permit sender to go ahead	Lower flag to front and keep it down
To call a **KNOWN** station or organization	Give its call three times, then sign. (See "How to call and to Sign")
To call an **UNKNOWN** station or organization	Call with 0 (zero) three times, then sign
To call **ALL TROOPS WITHIN SIGHT WHO ARE UNDER THE COMMAND OF THE PERSON SIGNING**	Call with 4 three times, then sign

Note:—The above is for handy reference only, for details see "How to Break," "How to Acknowledge," and "How to Call and Sign." Before making any call, make the "attention" signal for some time.

SEMAPHORE ONLY

Error in **SENDING** (for sender only to use)	Wave flag in position of "d" * (then begin word over)
Error in **RECEIVING** (for receiver only to use)	Signal "attention" till sender stops (see "How to Break")
To break or stop the sender	Signal "attention" till sender stops
To permit sender to go ahead	Signal "attention ga interval"
To call a **KNOWN** station or organization	Give its call three times, then sign
To call an **UNKNOWN** station or organization	Call it with "numerals 0" (zero), and sign
To call **ALL TROOPS WITHIN SIGHT WHO ARE UNDER THE COMMAND OF THE PERSON SIGNING**	Call with "numerals 4," and sign

Note:—The above is for handy reference only, for details see "How to Break," "How to Acknowledge," "How to Call and Sign," etc. Before making any call make the "Attention" signal several times.

Note in regard to use of Nr and No.:—The signalist uses "nr" as his abbreviation for the word "number," but when the writer of a message has written "no. 7"the signalist sends it so, and not "nr 7." Hence, the signalist uses "nr 1," etc., in beginning a Standard Field Message, also uses "nr" and not "no" after the word "Hour" in the Standard Field Message blank.

Digitized by Google

WIGWAG AND SEMAPHORE COMBAT-CODE LETTERS

INFANTRY ONLY

Note:—The first code letter is preceded by "U," and "X" is used only if message words are to follow code letters, otherwise omit.

Am	Ammunition going forward; Ammunition required
C	Charge; Am about to charge if no instructions to contrary
Cf	Cease firing
Dt	Double time; Rush; Hurry
F	Commence firing
Fb	Fix bayonets
Fl	Artillery fire is causing us losses
G	Move forward; Am preparing to move forward
H	Halt
K	Negative (as "U k Cf" . . . do not cease firing)
Lt	Left
M	Bring up the horses; Horses going forward
O	What is the . . . ? (as "U O Rn" . . . What is the Range?)
P	Affirmative; "Yes"
R	Received and understood (Not preceded by "U")
Rn	Range
Rt	Right
S	Support going forward; Support needed
Suf	Suspend firing
T	Target (As "U T X Cav" . . . Target, cavalry)
U	Combat-Code Letters follow
X	Combat-Code Letters end, and message words follow

CAVALRY ONLY

Note:—The first code letter is preceded by "U," and "X" is used only if message words are to follow code letters, otherwise omit.

Am	Ammunition going forward; Ammunition required
C	Charge; Am about to charge
Cf	Cease Firing
Dt	Double Time; Rush; Hurry
F	Commence Firing
Fl	Artillery fire is causing us losses
G	Move forward; Preparing to move forward
H	Halt
K	Negative (As "U K F" do not commence firing)
Lt	Left
M	Bring up the horses; Horses going forward
O	What is the . . . ? (As "U O T" what is the target)
P	Affirmative (Means "yes," usually to a question asked)
R	Received and understood (Not preceded by "U")
Rn	Range
Rt	Right
S	Support going forward; Support needed
Suf	Suspend firing
T	Target (As "U T X" wagon tn" . . . target, wagon train)
U	Combat-Code Letters follow
X	Combat-Code Letters end, and message words follow

FIELD ARTILLERY ONLY

Note:—Field Artillery does not use "U" as a Combat-code signal.

A	Error
Ad	Additional
Akt	Draw Ammunition from Combat Train
Al	Draw Ammunition from Limbers
Am	Ammunition going forward

Digitized by Google

Amc .....At my command
Ap .....Aiming Point
B (numerals)..Battery (so many) rounds
Bs (numerals) (Such) Battalion Station
Bl .....Battery from Left
Br .....Battery from Right
C .....Charge; Am about to charge
Cf .....Cease Firing
Cs .....Close Station
Ct .....Change Target
D .....Down
Df .....Deflection
Dt .....Double Time; Rush; Hurry
F .....Commence Firing
Fcl (numerals).On first piece close by (so much)
Fl .....Artillery fire is causing us losses
Fop (numerals).On first piece open by (so much)
G .....Move forward; Preparing to move foward
H .....Halt; Action suspended
Ix .....Execute; Go Ahead; Transmit
Ji .....Report firing data
K .....Negative. "No"
Kr .....Corrector
L .....Preparatory; Attention
LcL (numerals).On fourth piece close by (so much)
Lop (numerals).On fourth piece open by (so much)
Lt .....Left
Ll .....Left from the left
Lr .....Left from the right
Le (numerals)..Less (so much)
Md .....Move down
Ml .....Move to your left
Mr .....Move to your right
Mu .....Move up
Mo (numerals) More (so much)
N .....Annul; Cancel
O .....What is the . . . ? Interrogatory
P .....Affirmative; "Yes"
Ps .....Percussion; Shrapnel
Qrq .....Send faster
Qrs .....Send slower
Qrt .....Cease sending
R .....Received and understood
Rs .....Regimental Station
Rl .....Right from the left
Rr .....Right from the right
Rn .....Range
Rt .....Right
S .....Subtract
Scl (numerals)..On second piece close by (so much)
Sop (numerals).On second piece open by (so much)
Sh .....Shell
Si .....Site
Sss .....Support needed
T .....Target
Tcl (numerals)..On third piece close by (so much)
Top (numerals).On third piece open by (so much)
U .....Up
Y (letter) .....Such battery station

Digitized by Google

COAST ARTILLERY ONLY

Note:—Coast Artillery does not use "U."

Coast Artillery, when serving as Infantry, uses the abbreviations as given for Infantry, otherwise the following.

C	*	Commence towing
D	*	Distress
I	*	Come in
K	*	Range correct, ready to fire
L	*	Incline to port
O	*	Go out
R	*	Incline to starboard
S	*	Hold stationary
T	*	Turn
Z	*	Close practice

QUICK REFERENCE INDEX TO ABBREVIATIONS AND CALLS

This list includes all the abbreviations and calls that are shown in different places throughout the text, including all the one and two letter abbreviations of the List of Abbreviated Words.

Any abbreviations not herein listed, will be found in the List of Abbreviated Words, page 50.

NUMERAL ABBREVIATIONS—CALLS

0	Unknown body of troops	11	A	Companies, Troops, or Batteries
1	1st Battalion or Squadron	12	B	
2	2nd Battalion or Squadron	13	C	
3	3rd Battalion or Squadron	14	D	
4	All troops within sight under command of person signing	21	E	
		22	F	
5	Maching guns; or Machine Gun Company	23	G	Companies or Troops
		24	H	
6	Field Train	31	I	
7	Regiment	32	K	
8	Brigade	33	L	
9	Division	34	M	
		35	Headquarters Company	
		36	Supply Company	

ONE-LETTER ABBREVIATIONS

A Error (if repeated, for all arms, semaphore)

B Battery (F. A.)

C Charge, or about to (All)
Center (word list)
Cavalry (Branch of Service)
Commence Towing (C. A. C.)

D Distress (C. A. C.)
Down (F. A.)

E East (word list)
Engineers (Branch of Service)

F Commence Firing (All)

G Move forward, or about to (All)

H Halt (repeated, all arms)
Action suspended (F. A.)
Hospital troops (Branch of Service)

I Come in (C. A. C.)
Infantry (Branch of Service)

J

K Negative—"No" (All)
Range Correct, ready to fire (F. A.)

L Preparatory, attention (All)
Incline to port (C. A. C.)
Fractional bar (Author)

M Bring up horses, or horses going forward (Inf.-Cav.)

N Annul, cancel (All)
North (word list)
Between whole number and its fraction (Author)

O What is the . . . ? (All)
Interrogatory (All)
Go out (C. A. C.)

Digitized by Google

P Affirmative—"Yes" (All)
Q Q. M. C. Troops (Branch of Service)
R Received and understood (All)
Incline to starboard (C. A. C.)
S Support going forward, needed (if repeated, all troops)
Subtract (F. A.)
Hold stationary (C. A. C.)
South (word list)
Signal Troops (Branch of Service)
T Target (All)
Turn (C. A. C.)
U Up (F. A.)
Combat Code Letters follow (Inf. and Cav.—Author)
You (word list)
V
W West (word list)
X Combat Code Letters end, and msg words follow (Inf.-Cav.—Author)
Y Such battery (F. A.)
Yes (word list)
Z Close practice (C. A. C.)

TWO-LETTER ABBREVIATIONS

Aa Error (Semaphore)
Ab Alabama
Ac Ambulance Company
Ad Additional
Af After
Ag Advance Guard
Ak Please acknowledge
Al Ammunition from limbers
Am Ammunition forward, or required
12 midnight to 12 noon
Ap Aiming point
Ar Arkansas
As Alaska
Ay Army
Az Arizona

Bc Battery Commander
Bf Before
Bg Brigadier General
Bk Break; broke
Bl Battery from left
Bn Battalion
Br Battery from right
Bs Battalion Station
By Battery

Ca Coast Artillery
Cf Cease firing
Ck Check
Cl Colorado
Cn Caisson
Co Company
Cr California
Cs Close Station
Ct Change Target
Cu Connecticut
Cz Canal Zone

Da Day
Dc District of Columbia
De Delaware
Df Deflection
Dh Detachment (call)
Ds Dressing Station
Dt Double time; rush
Dx Dash (semaphore)

En Eastern

Fa Field Artillery
Fb Fix Bayonet
Fd Florida
Fg Flank Guard
Fh Field Hospital
Fk Flank
Fl Art. causing losses
Fm From
Fo Field Order
Fs First Aid Station

Ga Go ahead
Gb Goodbye
Gn Gun, or guns
Go General Order
Gr Georgia

Hg Hand grenades
Ho Hour
Hq Headquarters
Hr Here, hear
Here is a msg for you
Hv Have

Ia Iowa
Id Idaho
Il Illinois
Ix Execute; transmit

Jl Report firing data

Ka Comma (semaphore)
Kg Commanding General
Kn Colon (semaphore)
Ko Commanding Officer
Kr Corrector
Ks Kansas
Ky Kentucky

La Louisiana
Lh Led horses
Ll Left from left
Lm Limber(s)
Lr Left from right
Lt Left
Lieutenant

Ma Massachusetts
Mc Marine Corps

Digitized by Google

Md Move down
Me Maine
Mg Machine gun(s)
Mh Michigan
Mi Mississippi
Mk Make
Ml Move left
Mn Maryland
Mo Missouri
More
Mp Military Police
Mr Move right
Ms Minnesota
Mt Montana
Mu Move up
Mv Move

Na National Army
Nb Nebraska
Nc North Carolina
Nd North Dakota
Ne Northeast
Nh New Hampshire
Ni Night
Nj New Jersey
Nm No more
Nr Number
Nu Not for you
Nv Nevada
Nw Northwest
Nx New Mexico
Ny New York

Oa Oklahoma
Ob Official business
Og Oregon
Oh Ohio
Ok All right
Op Outpost

Pa Pennsylvania
Pi Philippine Islands
Pl Patrol
Pm 12 noon to 12 midnight
Pn Platoon
Parenthesis
Po Post Office
Pr Porto Rico
Ps Philippine Scouts
Percussion shrapnel
Pt Point

Qm Quartermaster
Qr Quarter
Qs Question mark (semaphore)

Rg Rear Guard
Ri Rhode Island
Rl Right from left
Rn Range
Ro Regimental order
Rr Railroad
Rs Regimental station
Rt Right
Rv Reserve

Sa South Dakota
Sc Signal Corps
Sd Squad
Se Section
Sh Shell
Si Semi-colon (semaphore)
Sk Sick
Sl South Carolina
Sn Sanitary
So Signal Officer
Special Order
Sq Squadron
Ss Signal Station
Su Support
Sw Southwest
Sx $ (semaphore)

Te Tennessee
Th Territory of Hawaii
Tm Trench mortars
Tn Train
Tr Troop
Ts This
Tt That
Tx Texas

Ur Your
Ut Utah

Va Virginia
Vo Volunteer(s)
Vt Vermont

Wa Washington
Wi With
Wn Western
Ws Wisconsin
Wt Weight
Wv West Virginia
Ww Waterworks
Wy Wyoming

Xx Words not part of msg

Yd Yard(s)

Zz Figures follow (code)

THREE-LETTER ABBREVIATIONS

These are calls, and refer to persons commanding vehicles, motor trucks, pack animals, etc., of the branches of the service shown. All other three-letter abbreviations will be found in the List of Abbreviated Words, page 50.

Amb Ambulances
Amm Ammunition section
Avi Aviation vehicles
Bag Baggage section
Bri Bridge equipment vehicles
Com Combat section
Dtn Detachment vehicles (any)
Hos Hospital vehicles or train
Nvy Navy (exception)
Pak Pack train or section
Pio Pioneer section vehicles
Pon Ponton section vehicles
Rad Radio section vehicles
Rat Ration section
Spn Supply train, any kind
Tel Telegraph section vehicles
Qtn Any train belonging to the Q. M. Corps

Digitized by Google

ENCIPHERING AND DECIPHERING MESSAGES

The cipher square (sometimes called the alphabetical square) given in this manual is NOT the cipher square formerly used by the Signal Corps, and it should not be confused with that square.

The cipher square herein given was designed by the author so as to give results identical with THE SIGNAL CORPS CIPHER CODE, so that the signalist need not carry a disk in the field, yet he will be able to decipher messages enciphered by means of the disk. It is fully protected by copyright.

TO ENCIPHER A MESSAGE

Let the **key word** be "Washington."
Let the message be "Send 20 men."
Write the key word, and under it write the message, as

W A S H I N G T O N W A S
S E N D Z Z 2 0 Z Z M E N

To encipher,
Under the COLUMN headed W and LINE headed S read E
" " " " A " " " E " W
" " " " S " " " N " F
" " " " H " " " D " E
" " " " I " " " Z " J etc.

Thus obtaining the cipher message "Ewfejofkpokwf"
Which would be signaled as "Ewfej ofkpo kwfbl" (last two being any letters, so as to complete the five to a word).

A **KEY-LETTER** may be used instead of a **KEY-WORD**, in which case the procedure is the same, the letter being repeated each time.

TO DECIPHER A MESSAGE

The operation of deciphering a message is identical with that given for enciphering one.

Let the **key word** be "Washington."
Let the cipher message be "Ewfejofkpokwf."
Write the key word, and under it write the cipher message:

W A S H I N G T O N W A S
E W F E J O F K P O K W F

To decipher
Under the column headed W and line headed E read S
" " " " A " " " W " E
" " " " S " " " F " N
" " " " H " " " E " D
" " " " I " " " L " Z

Thus obtaining the message "Send ZZ BJ ZZ men"
As "ZZ" is the indication for numerals we neglect it; and translate "BJ" into "20," so we get "Send 20 men"

Note:—Figures should usually be avoided, words being used instead, unless the words would be too long. "ZZ20ZZ" contains the same number of characters as "TWENTY," hence no saving.

Digitized by Google

ALPHABETICAL CIPHER SQUARE

(Identical in results with Signal Corps cipher disk)

NOTE:—This "square" is more easily and quickly handled than is the Cipher Disk, and gives identical results. To understand its use see "Enciphering and Deciphering Messages," page 67.

TOP LETTERS AND NUMBERS:—These are the letters of the KEY WORD, or KEY LETTER.

SIDE LETTERS AND NUMBERS:—These are the letters of the MESSAGE when ENCIPHERING, and are the letters of the RECEIVED CIPHER when DECIPHERING.

INTERIOR LETTERS:—These are the letters of the CIPHER when ENCIPHERING, and are the letters of the TRANSLATED MESSAGE when DECIPHERING.

Key / Msg	1 A	2 B	3 C	4 D	5 E	6 F	7 G	8 H	9 I	0 J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1 A	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
2 B	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
3 C	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x
4 D	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
5 E	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
6 F	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
7 G	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
8 H	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
9 I	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
0 J	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
K	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
L	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
M	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n
N	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m
O	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l
P	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k
Q	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j
R	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i
S	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h
T	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g
U	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f
V	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e
W	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d
X	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c
Y	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b
Z	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a

This "SQUARE" is protected by copyright.

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google